LEVEL II

A MOBILIZATION PLANNING STUDY: LEADTIMES FOR MOVEMENT OF ARMY PLANT EQUIPMENT TO MOBILIZATION PRODUCERS

APRIL 1979

US ARMY INDUSTRIAL BASE ENGINEERING ACTIVITY
ROCK ISLAND, ILLINOIS
61299

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER / 2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) (6) A Mobilization Planning Study: Leadtimes for Movement of Army Plant Equipment to Mobilization Producers,	5. TYPE OF REPORT & PERIOD COVERED (9) FINAL rpt.
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Mr. Gerald R. Fischer (10) Gaylen	8. CONTRACT OR GRANT NUMBER(s).
9. PERFORMING ORGANIZATION NAME AND ADDRESS US Army Industrial Base Engineering Activity ATTN: DRXIB-P Rock Island, IL 61299	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS OMA 728011.3
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Materiel Development & Readiness Command ATTN: DRCPP-I 5001 Eisenhower Ave., Alexandria, VA 22333	12. REPORT DATE (11) April 1979
	13. NUMBER OF PAGES 91
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) (12) 103	15. SECURITY CLASS. (of this report) Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for Public Release; Distribution Unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Industry, Civil Affairs, Mobilization, Survey, IPE, Machine Tools, Readiness, Stockage, Transportation, Planning, Plant Equipment Package

20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The purpose of this study was to test the validity of an Industrial Preparedness Planning Assumption which states that Government-owned production equipment will be provided to defense industries within 60 days after mobilization day. About 14,700 Army owned machine tools are being retained at various Government storage sites and are not available to defense producers during the initial mobilization production build-up period. The mobilization shipping capacities of the storage sites were evaluated. An analysis of documented operating procedures and information provided by storage site personnel revealed a significant variance in shipping rates

20. (Cont'd)

among storage sites; some can meet the assumption's 60 day deadline while others require up to 140 days. The 60 day assumption, therefore, cannot be consistantly applied during the negotiation of planning agreements with Army producers.

THE VIEWS, OPINIONS, AND/OR FINDINGS CONTAINED IN THIS REPORT ARE THOSE OF THE AUTHOR AND SHOULD NOT BE CONSTRUED AS AN OFFICIAL DEPARTMENT OF THE ARMY POSITION, POLICY, OR DECISION, UNLESS SO DESIGNATED BY OTHER OFFICIAL DOCUMENTATION.

A MOBILIZATION PLANNING STUDY:

LEADTIMES FOR MOVEMENT OF ARMY PLANT EQUIPMENT TO MOBILIZATION PRODUCERS

APRIL 1979

Prepared by

GAYLEN R. FISCHER
Mechanical Engineer
Preparedness Division

Approved:

JAMES P. BRUEN
Chief
Preparedness Division

Released:

J. R. GALLAUGHER
Director, US Army Industrial
Base Engineering Activity

US ARMY INDUSTRIAL BASE ENGINEERING ACTIVITY
Rock Island, Illinois
61299

SUMMARY

The purpose of this study was to test the validity of an Industrial Preparedness Planning assumption. The assumption states that Government-owned production equipment will be provided to defense industries within 60 days after mobilization day. The assumption is used as a part of the Army's mobilization planning process with defense producers. In effect, it advises the producers on equipment availability as they are being solicited to allocate production capability for military items. The assumption, therefore, influences the results of the planning process in terms of the values given to item leadtime and capacity.

The Army retains approximately 39,000 pieces of Industrial Plant Equipment in 200 Plant Equipment Packages. Each package is equipped to manufacture one item of Army materiel or a group of generic items. Approximately 14,700 pieces are stored in Government storage sites and are not available to defense producers during the initial mobilization production build-up period. The availability of this equipment to defense industry depends upon the shipping capacities of the storage sites and responsiveness of the domestic civil transportation system.

The mobilization shipping capacities at the storage sites were evaluated during on-site visits. An analysis of documented operating procedures and information provided by storage site management personnel revealed that response to the expected onslaught of shipping orders will be inadequate. Shipping capacities varied significantly among storage sites. Some sites clear their inventories rapidly and can meet the assumption's 60 day deadline. Other sites, however, require up to 140 days.

It was concluded that the 60 day assumption is not consistently valid for all Army packages. Recommendations addressed the update of mobilization shipping orders, the development of equipment movement priorities, the establishment of inventory controls for accessory equipment items in the packages, the submission of equipment shipping requirements to claim emergency transportation services, and the temporary transfer of emergency shipping resources to the pacing storage sites. In addition, it was recommended that each Army producer be given an individual assessment of equipment availability.

LIST OF TABLES

TABLE OF CONTENTS

I. INTRODUCTION

Purpose

The purpose of this study is to test the validity of a published Industrial Preparedness Planning (IPP) assumption. (Note: A list of acronyms used in this study is included in Appendix A.) Among several conditions and assumptions used in DoD mobilization planning efforts with industry, one assumption concerns the provision of Government-owned production equipment: "Production equipment identified and available in the unassigned DoD Industrial Reserve (DIR) will be provided to the requiring activity for installation within 60 days after M-Day". The 60 day reactivation estimate, as it applies to production equipment at storage sites that are remote from user sites, is the elemental issue for this study. Since reactivation time is examined under assumed conditions of full mobilization, the result of this study can be compared directly to the 60 day estimate.

Scope

The assumption refers to the post mobilization day (M-Day) availability of the Defense Industrial Reserve. This study addresses a major segment of the DIR, Army Industrial Plant Equipment (IPE) stored at several CONUS sites and assigned to the Plant Equipment Packages (PEP's). Additional consideration is provided for idle DoD General Reserve IPE and for Air Force and Navy PEP items that are stored at the same CONUS sites. All centrally stored IPE will compete for the same material handling and transportation services during a mobilization; therefore, no segment of this inventory is neglected in pursuit of the result, a reactivation time frame for Army IPE.

Objectives

The specific objectives of this study are:

1. Investigate and document existing plans for the emergency movement of IPE. Determine if such plans are complete and well coordinated with each responsible DoD component. Determine if such plans accommodate competing reactivation demands from other services, grant any reactivation priorities, and, in general, provide sound procedural rules.

2. Estimate the time needed to remove the PEP's from the storage sites. The estimate is based on the physical characteristics of each storage site to include transportation services, storage layout, IPE staging discipline, manpower resources, and material handling capabilities.

3. Estimate the time needed to transport the IPE to the mobilization users. This estimate is contingent upon a transportation availability determination by the Military Traffic Management Command (MTMC). MTMC monitors the capabilities of the domestic military and civilian land transportation systems and anticipates the demands to be made on those systems by the movement of troops, their weapons and essential industrial commodities.

Methodology

The study made use of information in Army regulations pertaining to transportation and IPE layaway and reactivation procedures. The Defense Logistics Studies Information Exchange (DLSIE) provided a bibliography of previous studies on transportation and IPE. A reading of several of these studies revealed no ongoing or previous efforts that could be used to support the purpose and scope of this study.

Inventory data on Army PEP's was provided by the Defense Industrial Plant Equipment Center (DIPEC). A thorough examination of the DIPEC SP-6 computer printout identified the Army PEP central storage sites, PEP users and the IPE quantity per PEP, per site. Informal contacts with DIPEC produced useful data on the DoD General Reserve and other service PEP inventories.

A survey questionnaire was employed during visits to the central storage sites. The questionnaire measured the local adequacies of emergency plans, IPE preparation and handling capabilities, and transportation availability.

Contact with MTMC produced insights regarding the expected compatability of IPE movement forecasts with current reporting procedures.

Background

The DIR, by definition, includes Government owned manufacturing equipment and industrial plants. Managerial responsibility for manufacturing equipment is assigned to the armed services and DIPEC, a subordinate activity of the Defense Logistics Agency (DLA). DIPEC maintains automated inventory records for all DoD owned IPE and manages the DoD General Reserve. The General Reserve contains idle, unassigned IPE. The idle portion is maintained in central storage facilities with a remnant temporarily stored at industrial facilities upon termination of production runs.

Active IPE and Plant Equipment Packages are managed by the armed services. The full array of manufacturing equipment includes IPE and other types such as special tooling (ST), special test equipment (STE) and other

plant equipment (OPE). As stated above, DIPEC maintains an automated inventory of all DoD IPE, including PEP's. The PEP's, in addition to IPE, contain significant quantities of ST/STE and OPE. Centralized inventory records for non-IPE do not exist; therefore, the total quantity of all equipment in PEP's is unknown. During layaway, ST/STE and OPE are labeled to preclude loss when storage on or near the basic machine tools is not feasible. The reactivation of off-site PEP lines, therefore, places an undefined burden on shipping capability in order to accommodate ST/STE and OPE.

PEP's under Army control contain approximately 39,000 pieces of DIPEC reportable IPE. Fifty-nine percent is located at planned producers' sites, either in use or in storage. A small share of this percentage is on-loan (allocated to other use temporarily) as needed to meet current schedules which are of a high priority. About three percent is scattered off-site at various ammunition plant storage areas throughout the Midwestern United States. Thirty-eight percent, approximately 14,700 pieces, is concentrated at eight central storage facilities. Table 1 provides a location summary for these storage sites.

PEP OFF-SITE LOCATION SUMMARY

STORAGE SITE (DOD COMPONENT)	# OF PEP'S	# OF ITEMS
DIPEF ATCHISON, ATCHISON, KA (DLA/DIPEC)	103	3559
RAVENNA AAP, RAVENNA, OH (DARCOM/ARRCOM)	67	2515
PONTIAC ASF, PONTIAC, MI (DARCOM/TARCOM)	67	2351
SENECA AD, ROMULUS, NY (OARCOM/OESCOM)	88	2017
OEF OEP MECHANICSBURG, MECHANICSBURG, OH (DLA/DIPEC)	106	1462
DEF DEP TRACY, STOCKTON, CA (OLA/DIPEC)	80	1223
DEF DEP COLUMBUS, COLUMBUS, OH (DLA/DIPEC)	98	1217
JOLIET AAP, JOLIET, IL (DARCOM/ARRCOM)	15	365
TOTAL		14,709

TABLE 1

In total, Army controls approximately 200 PEP's. The number varies based on submittal of Formats A which establish PEP's and Formats C which disestablish PEP's. At the time of this study, there were 200 approved PEP's with one pending approval. This study is based on the data for the 200 approved PEP's. Some packages, like PEP #112, are located completely on-site. PEP #112 is reserved for load, assemble, and pack operations at Iowa AAP. Of 240 pieces, 48 are activated for current production while the rest is stored at the plant. Sixty-seven PEP's have at least 95% of their equipment stored on the planned producers' sites. The industrial readiness posture for these PEP's is apparently high since few long distance transfers are needed to establish full availability.

Many PEP's, however, are located at a variety of sites. PEP #727, supporting a basic gun mount and machine gun mission at Rock Island Arsenal, contains 579 pieces. Seventeen pieces are now activated for production, 385 pieces are stored on the installation, 29 pieces are stored in Atchison Cave, one piece is stored at Ravenna, 60 pieces are stored at Mechanicsburg, 27 pieces are stored at Stockton and 60 pieces are stored at Columbus. In this case, five storage facilities must respond to the mobilization needs of one PEP user.

The situation that occurs with PEP #727 is quite common, repeating itself to varying degrees in the remaining 133 PEP's. The readiness prognosis for these PEP's is low. A summation of the "# of PEP's" column in Table 1 would show that 624 PEP shipments must be processed by the eight storage sites and that 624 different storage-to-user transportation links must be established. On the average, each of these 133 packages is stored at four or five separate off-site locations.

PEP reactivation, as a basic milestone in phased mobilization build-up capabilities for military industrial facilities, is of interest to all PEP users such as arsenals, ammunition plants, and private industry. The user of a PEP is known as a planned producer. Planned producers in the private sector, by DD Form 1519 "Planning Agreement," consent to produce specified quantities of military hardware and munitions within a specified time after M-Day.

The planning process itself involves face-to-face negotiation between field level DoD and contractor representatives. A mobilization production schedule, which describes the planned item quantity and leadtime, is the end product of the negotiation. It is based on the planned producer's assessment of the Technical Data Package for the item; his own experience with the planned item or like items; his reaction to the time phased delivery pattern requested by DoD; and, his understanding of how and when his mobilization capability will be augmented by Government furnished component parts, basic materials, and equipment reserved in the PEP.

The planning process yields a characteristic outlook of mobilization production capability on an item by item basis. This outlook serves two purposes. First, production shortfalls can be identified for corrective

action. Second, peacetime acquisition for the war reserve stockpile can be held at a pre-determined inventory level if the balance can be produced by responsive mobilization facilities. In this way, the planning process is the vital issue for this study. If any real economic or mobilization readiness benefits are to be achieved through the planning process, the IPE reactivation estimate used in that process must be accurate.

Several years ago, planned producers had no uniform guidance on IPE reactivation. Some producers assumed that all PEP items would arrive at their receiving docks during the first week of mobilization. Other producers assumed that PEP items would arrive according to some prescribed sequence that permits equipment installation as manufacturing lines are established. The acceptance of either assumption during planning negotiations usually generated overly optimistic mobilization production schedules, particularly with regard to planned item leadtime.

More recently, the 60 day estimate evolved through an informal consensus of DoD planning activities. The estimate was not embraced by all planners. But when used, it was a step in the right direction. It made the planned producers aware of a possible bottleneck. They responded by compensating their mobilization production schedules to allow time for PEP delivery.

Within the last year, the Office of the Under Secretary of Defense for Research and Engineering has published a standard IPE reactivation leadtime estimate. A memorandum for the Assistant Secretaries of the Military Departments, dated 8 May 1978, promulgates the use of a Data Item Description (DID) and Scope of Work Statement for Industrial Preparedness Planning (IPP) on selected major systems and equipment. In essence, the policy defines an improved system for gathering IPP data. Improvements are derived by describing a set of rules, conditions and assumptions, that are more complete than those used for DD Form 1519 planning, and then paying the contractor (planned producer) to develop the data. The assumption concerning provision of production equipment is basic to the development of IPP data under this system.

> ASSUMPTION: "Production equipment identified and available in the unassigned DoD Industrial Reserve (DIR) will be provided to the requiring activity for installation within 60 days after M-Day."

II. DISCUSSION

Emergency Reactivation Policy

A detailed account of the policies and procedures pertaining to IPE storage, preparation for shipment and transport appears in Appendix B. A review of existing directives, regulations and military technical publications revealed an absence of definitive emergency plans for administering the orderly removal of IPE from the central storage sites. Emergency plans for the shipment of DoD material are, by comparison, much more definitive.

IPE Storage and Reactivation

PEP equipment is placed in central sites if, for economic or physical reasons, it cannot be stored at or near the planned producer sites. The owning military command selects the storage site. DIPEC advises the PEP owner about warehousing space and capabilities, assists in the administration of physical transfers and keeps inventory records for all DoD owned IPE. Warehousing and preservation disciplines provided by military technical publications require that the machines are accessible and, if possible, in ready-to-ship condition. Mobilization shipping orders, by regulation, are prepared for PEP IPE and should be prepared for manufacturing equipment items that are not classed as IPE but are, by necessity, assigned to the PEP's as accessories to the planned production process. A mobilization shipping order identifies the PEP, its planned producer and each IPE item therein. The owning commands, DIPEC and the central storage sites retain copies which are updated annually. PEP shipments, during mobilization, will be directed by MILSTRIP notification from DIPEC, but only upon request from the owning command. Procedures for mobilization reactivation are generally the same as those used for routine reactivation and loan actions. The invocation of the mobilization shipping orders marks the only specified change in operating procedure during emergencies.

IPE Transportation

Detailed guidance is available that describes procedures for the control of the domestic transportation system to insure the movement of DoD traffic. A contingency planning system does exist to measure the expected amount of military and essential civilian traffic against the expected transportation resources. At this time, no Army IPE movement forecasts have been submitted to this system and, as a consequence, IPE has no claim on emergency transportation services. Discussions with HQ, MTMC personnel indicate that reporting provisions for forecasting IPE movement are available under current regulations. The preparatory provisions for reporting to MTMC are furnished by this study: the locations of the storage sites and their consignees are defined; the shipping

capacities at the storage sites are established; and, the total IPE shipping quantity to each consignee is established. However, a final reporting provision, a shipping sequence among PEP's, is not furnished. The submissions to MTMC must define the order in which consignees are served by the central storage sites.

Inventory Data

As stated previously, the Army has cognizance over approximately 200 PEP's. A comparison of Army PEP inventory to Navy, Air Force, and DLA PEP inventories is displayed in Table 2. Army manages 82% of the total number of PEP items and 81% of the total PEP dollar value, expressed as original acquisition cost.

COMPARISON OF PEP INVENTORIES
AMONG DOD COMPONENTS

SERVICE	# OF PEP'S	IPE QUANTITY	ACQ. COST
ARMY	200	39,006	$727,238,317
NAVY	13	5,100	96,194,013
AIR FORCE	4	3,649	68,940,921
DLA	2	26	220,606

TABLE 2

SOURCE: RCS: DIPEC SS-2, 31 DECEMBER 1978

Prior to March 1978, Army managed 181 approved PEP's containing 33,814 IPE items. A summary of PEP on-site versus off-site location is provided in Table 3.

ARMY PEP STATUS AND LOCATION

	IPE QUANTITY BY STATUS CODE			RESERVE	PERCENT RESERVE
	(1) ACTIVE	(2) INTRANSIT	(3) RESERVE	IPE QTY AT STORAGE SITES	IPE QTY AT STORAGE SITES
PEP'S WITH PLANNED PRODUCERS	5,182	312	23,314	9,785	42.0
PEP'S WITHOUT PLANNED PRODUCERS	34	4	4,968	4,726	95.1
TOTAL	5,216	316	28,282	14,511	51.3

TABLE 3

SOURCE: 31 MARCH 1978, RCS: DIPEC SP-6, ARMY MONTHLY PEP MANAGEMENT REPORT

The column totals show that 5,216 items are in active use and 316 items are being transported between storage and user locations, different user locations or different storage locations. Of 28,282 inactive items, only 14,511 are located at the eight storage sites. The remaining inactive inventory with several PEP's exhibiting minor exceptions, is located at the intended points of use. Appendix C provides a display of on-site versus off-site location for each of these 181 PEP's.

In March of 1978, Army acquired 16 munitions PEP's from Navy and subsequently established three more PEP's at munitions plants which were transferred from Navy to Army. These 19 PEP's contain 2,947 pieces of IPE. Only 200 pieces are located at the eight storage sites. The remainder, with the exception of 54 pieces, is located at the intended points of use. The recent acquisition of these 19 PEP's, therefore, did not materially add to Army's mobilization shipping requirements at the storage sites. Detailed storage site data is provided in Appendix D.

The addition of the former Navy PEP's and munitions plants increased the Army PEP inventory to 36,761 pieces and the inventory stored at the eight sites to 14,711 pieces. As shown in Table 2, the Army PEP inventory now contains 39,006 pieces. This gain is administrative in nature and has occurred in the last six months. It is attributed to the use of the new IPE status code, 1B. Over 2,000 items which had been reported as 1A (active - non PEP items) are now coded as 1B (active - but tagged to become a PEP item at the end of current production). It should be noted that no significant gains or losses have occurred in the PEP inactive inventory since March 1978. The locations of inactive items remain static under usual peacetime operations. Physical transfers between storage sites are

rare. Nevertheless, IPE storage operations are sometimes terminated thereby forcing physical transfers. During FY78, this situation occurred at Lima Army Modification Center. Due to the XM1 Tank facility construction at Lima, 400 pieces of inactive PEP IPE were transferred to Pontiac Army Storage Facility and 175 pieces were transferred to Seneca Army Depot. These transfers are included in the PEP storage site shipment data which follows. Former Navy-owned IPE is also included.

Table 4 shows the IPE quantities to be shipped from each storage site to planned producers located within the Federal Preparedness Agency (FPA) regions. Region 5, the Midwestern United States, has more planned producers requiring PEP's and more storage sites to serve those producers than any other region. However, many inter-regional shipments will be required. For example, Stockton will ship 307 items to the Midwest while Mechanicsburg will ship 107 items to the Pacific Southwest. The quantities listed under the column heading, # X-FACILITY ITEMS, are attributed to PEP's without planned producers. Distributions for these items are unknown and will remain unknown until planned producers are found or until mobilization occurs. In the event of mobilization, the President can invoke the Defense Production Act of 1950 and assign military production responsibilities to selected commercial facilities. The "X-Facility" PEP's would then be shipped where needed.

PEP SHIPMENT SUMMARY

STORAGE SITE	# ITEMS TO BE SHIPPED TO EACH FEDERAL PREPAREDNESS AGENCY REGION								# X-FACILITY ITEMS
	1	2	3	4	5	6	7	9	
ATCHISON	58	41	120	129	798	837	240	58	1278
RAVENNA	122	29	16	19	1194	60	219	84	772
PONTIAC	78	39	4	5	1192	14	143	57	819
SENECA	809	81	57	9	364	20	70	44	563
MECHANICSBURG	105	120	138	28	496	81	96	107	291
STOCKTON	16	25	16	9	307	27	109	277	437
COLUMBUS	57	33	27	14	423	50	165	47	401
JOLIET	0	0	0	3	69	55	0	2	236
TOTALS	1245	368	378	216	4843	1144	1042	676	4797

TABLE 4

NOTE:

FPA REGION #	REGIONAL JURISDICTION
1	ME, VT, NH, MA, CT, RI
2	NY, NJ, DE
3	PA, WV, VA, MD
4	KY, TN, NC, MS, AL, GA, SC, FL
5	MN, WI, MI, IL, IN, OH
6	NB, IA, KA, MO
7	NM, OK, AR, TX, LA
8	MT, WY, UT, CO, ND, SD
9	CA, NV, AZ
10	WA, ID, OR

Detailed data for the summary presented in Table 4 is provided in Appendix E. Appendix E lists by storage site: the PEP number, the PEP quantity, the PEP user, the user location, and the highway mileage to the destination.

Storage Site Surveys

Seven visits were made to the central storage sites. Joliet AAP was not visited due to its relatively small inactive PEP inventory. A questionnaire was filled out during each interview with storage site management personnel. The questionnaires appear in completed form in Appendix F. A summary of several common characteristics is provided below:

1. Although each storage site is under the operating control of a higher headquarters group which provides overall policy on mobilization planning, none of the policy addresses specific actions relative to PEP IPE. The overall policy results in the preparation of the Field Activity War and Emergency Support Plan at each facility which outlines their operation under mobilization conditions. These plans do not include any special provisions for processing PEP IPE.

2. Special mobilization plans for movement of PEP IPE have not been established by the organizations directing operations at the storage site or by the managers of the packages.

3. The storage sites receive and file mobilization shipping orders for PEP items. In general, personnel at the sites do not review the orders to assure paperwork is received on each item in storage. In addition, sites that store other than IPE (i.e., OPE, ST, and STE) for packages do not receive instructions relative to those items in case of mobilization. In all cases, the storage sites have no specific plans for executing the shipping orders. Since an emergency situation has not been experienced at the storage sites, there are no procedures or plans available for use as reference. The sites would await instructions from Army PEP Managers in order to process items for shipment.

4. In event of mobilization, the storage site personnel assume that items could be shipped based on message or telephone requests instead of formal movement notices.

5. Shipping priorities among PEP's and between the PEP and General Reserve inventories have not been established.

6. Current storage layouts at the central storage sites appear well organized. No adverse effects on shipping capabilities should result from warehousing disciplines. PEP's are usually separated from the collocated General Reserve and are grouped by PEP number. Accessibility to any machine is generally good.

7. Competing demands for storage site shipping capability, due to post M-Day reactivations of Navy and Air Force PEP's, will be insignificant. With the transfer of 16 Navy PEP's, less than 200 pieces of other service IPE remain collocated with Army IPE. However, more than 21,000 pieces of General Reserve IPE are stored at the seven sites visited.

8. With one exception, current manpower levels will be inadequate for mobilization. Additional hiring and on-the-job training will be accomplished within one to four weeks after M-Day. Extended work hours are expected; up to 24 hours a day. Operations will continue on weekends and holidays.

9. Transportation services are generally adequate. Rail and truck docks are installed at or near all sites. Rail facilities at Pontiac are several miles away, but no adverse effect is expected. Water traffic services are available at Atchison and Stockton. Nearly all shipments are now sent by truck. The trucking companies respond to the consignor's call within one or two days. Oversized shipments are occasionally delayed by short term shortages of specialized rail cars and truck trailers.

10. In-house material handling equipment (MHE) capabilities at four storage sites will not be adequate to sustain mobilization operations. Mechanicsburg, Seneca, Pontiac and Ravenna will need additional MHE such as high capacity cranes and forklift trucks. Storage site managers stated that the additional MHE will be available after M-Day through lease or purchase from local vendors.

11. A frequently cited IPE shipping bottleneck occurs during packing, crating, and skidding. The mobilization shipping rates, as estimated during the on-site visits, are based on the assumption that strict military standards for IPE packaging will be waivered in emergencies. Instead, commercial IPE shipping practice will be observed. The storage site managers claim that this lower level of preparation will speed shipments and yet provide satisfactory protection from damage enroute.

Following the completion of the storage site visits, a review of mobilization shipping documents was conducted. The following major areas of concern were encountered: equipment assigned to "X-Facilities"; items without a DD Form 1149, Requisition and Invoice/Shipping Document; and items with outdated DD Forms 1149.

1. The 43 PEP's that do not have planned producers include approximately 5,000 items. The mobilization planning for the "X-Facility" PEP's is a complex topic for study in itself and will not be addressed here. Addressing the shipping orders only, it was discovered that in most cases there were no orders for "X-Facility" items. The lack of data would result in these items being kept in storage under protection of a PEP number when a valid requirement for a like item may exist as a result of the mobilization effort. For example, "X-Facility" IPE could be released to the General Reserve for possible redistribution during mobilization.

2. Under current IPP guidance, the mobilization shipping orders, see Appendix G, are used as the instrument to direct shipment of PEP IPE. The responsibility for movement notices is outlined in paragraph 5-15e of AR 700-90, Army Industrial Preparedness Program. The specific policy is that: "DIPEC issues mobilization shipping orders annually for IPE in plant equipment packages and distributes copies to each mobilization planning activity and IBEA. Planning activities will establish procedures to insure that plant equipment and ST/STE not included on DIPEC mobilization shipping orders are placed on standing mobilization shipping orders. These shipping orders will be updated annually during the annual recertification of plant equipment packages". The review of shipping orders at the US Army Industrial Base Engineering Activity (IBEA) disclosed that 16 PEP's did not have all items covered by DD Forms 1149. If this is representative of data at the storage sites, the planned producers would not receive all items retained for the PEP. The specific PEP's lacking shipping data are listed in Appendix H.

3. The review also disclosed that data on DD Forms 1149 for 13 PEP's were incorrect. This represents only the major data element, that is, the planned producer and his location. The majority of DD Forms 1149, since they were several years old, showed incorrect quantities of equipment and copies furnished to PEP managers who, in some cases, no longer plan for the item. This makes it difficult to determine whether personnel in the current Army PEP management structure have all shipment data. A common statement made by storage site personnel was that they would probably ship the quantity actually on hand regardless of the quantity shown on the DD Form 1149.

Overall planning for movement of PEP IPE from storage sites seems to be lacking. The lack of information relative to "X-Facilities," and the lack of correct DD Forms 1149 would result in a large quantity of equipment not being provided to planned producers.

Analysis of Data

The tables in this section present a forecast of the expected time frames required to clear the storage sites and the effects those time frames have on the planned producers. The forecast is based on the DIPEC reportable inventory at each site (Table 5) and the shipping rate estimates provided during the on-site visits (Table 6).

ARMY, OTHER SERVICE AND DOD
GENERAL RESERVE INVENTORY

	IPE QUANTITY			
	PLND PROD PEP ONLY	ALL ARMY PEP	ALL PEP	ALL PEP & RESERVE
ATCHISON	2281	3559	3559	5648
RAVENNA	1743	2515	2614	2838
PONTIAC	1532	2351	2351	2897
SENECA	1454	2017	2055	2991
MECHANICSBURG	1171	1462	1472	11,472
STOCKTON	786	1223	1223	5523
COLUMBUS	816	1217	1217	4586
TOTAL	9912	14,344	14,491	35,955

TABLE 5

Four different sets of inventory data and four results are presented for each site. The reason for presenting a range of data and results stems from the absence of established shipping priorities. Mechanicsburg exhibits some striking variations in inventory ownership; and thus, serves as an example. This site contains 1,171 pieces assigned to PEP's having planned producers. The destinations for this equipment are known. An additional 291 pieces are assigned to "X-Facility" PEP's, raising the Army owned PEP quantity to 1,462 pieces. Destinations for the "X-Facility" PEP items are unknown until planned producers are found. Ten pieces are assigned to other service PEP's, bringing the total to 1,472 pieces. In addition, this site contains 10,000 DoD General Reserve IPE items.

SITE CLEARANCE TIME FRAMES

SITE	SHIFT (HRS/DAY)	START RATE (ITEMS/DAY)	LEAD TIME (DAYS)	MAX RATE (ITEMS/DAY)	QTY SHIPPED DURING LEADTIME	QTY SHIPPED DURING END OF LEADTIME TO 60 DAYS	TOTAL QTY SHIPPED IN 60 DAYS	# DAYS NEEDED TO CLEAR SITE / PERCENT QTY SHIPPED IN 60 DAYS: PLND PROD PEP ONLY	ALL ARMY PEP	ALL PEP	ALL PEP & RESERVE
ATCHISON	24	8	7	100	378	5270	5648	26 DAYS 100%	39 DAYS 100%	39 DAYS 100%	60 DAYS 100%
RAVENNA	8	7	14	30	259	1380	1639	63 DAYS 94%	90 DAYS 69%	93 DAYS 63%	100 DAYS 58%
PONTIAC	12	1	21	12	136	468	604	138 DAYS 34%	206 DAYS 26%	206 DAYS 26%	252 DAYS 21%
SENECA	12	9	7	18	95	954	1049	83 DAYS 77%	114 DAYS 52%	116 DAYS 51%	168 DAYS 35%
MECHANICS-BURG	24	8	7	21	102	1113	1215	59 DAYS 100%	72 DAYS 85%	73 DAYS 82%	549 DAYS 11%
STOCKTON	8	24	—	24	—	1440	1440	33 DAYS 100%	51 DAYS 100%	51 DAYS 100%	230 DAYS 26%
COLUMBUS	16	5	7	15	70	795	865	57 DAYS 100%	84 DAYS 71%	84 DAYS 71%	308 DAYS 13%
TOTALS		82		220	1040	11,420	12,460				

TABLE 6

The results depend on which, if any, of the preceding inventories is provided priority attention. Assuming that all shipping resources are concentrated on planned producer PEP's, Mechanicsburg can clear just those items in less than 60 days. If, in the meantime, new planned producers are found for the "X-Facility" PEP's, the site can clear all Army PEP's in 72 days. Other service shipping requirements can be met in an additional day or less. If General Reserve reactivations are heavy, interference with PEP shipments would force the clearance time for all Army and other service PEP's well beyond 72 or 73 days. The true demand rate for General Reserve equipment or the expected peak demand period for this unassigned equipment is a matter for speculation. However, it appears unrealistic to assume that General Reserve shipments would be backlogged until PEP's are cleared.

For the purpose of comparing results between sites, the following optimistic assumptions are applied: no interference from other service PEP's or the DoD General Reserve and a total commitment of resources to Army PEP's. Atchison shows the best response; able to move 3,559 pieces in 39 days with the provision that planned producers are assigned to the "X-Facility" PEP's within 26 days. Pontiac is the pacing site; moving 2,351 pieces in 206 days provided that "X-Facility" PEP's in their possession are assigned within 138 days.

Four storage sites can better a 60 day deadline. In 60 days, Atchison can clear every item including those in the General Reserve, Stockton can clear all PEP's and some General Reserve, whereas, Mechanicsburg and Columbus can clear Army planned producer PEP's and little else.

Shipping capability estimates in Table 6 vary from site to site. In part, this variance can be traced to the given length of the work day. Managers at two sites expected, without doubt, to operate 24 hours/day. Others could not or did not envision the need for three shifts but several did extend expected daily operations by four or eight hours.

Although around-the-clock operations were not recommended by several site managers, let us assume, for the moment, that pacers: Ravenna, Pontiac, Seneca, and Columbus, can operate 24 hours/day. Then, assume that their learning curves (leadtimes) and maximum shipping capacities are proportionately increased. As an example, Seneca's shift basis increases from 12 to 24 hours, its leadtime increases from 7 to 14 days, and its maximum capacity also doubles to 36 items/day. It should be noted, however, that proportionate increases in leadtimes and capacities are unlikely. The extra personnel staffing and training burden may put Seneca's ideal leadtime well above 14 days and the inefficiencies inherent to multi-shift operations may hold the ideal capacity below 36 items/day. Based on the above assumptions, in 60 days Seneca clears Army planned producer PEP items and nearly all Army "X-Facility" and other service PEP items. Likewise, Ravenna clears every item and Columbus clears all PEP items and some General Reserve items. Pontiac is still the pacing site, clearing only 62% of the Army planned producer PEP items. Refer to Appendix I for a tabular presentation on 24 hour operations.

In the final analysis, the mobilization capabilities could be significantly better if 24 hour operations would be established at the storage sites. However, since storage site mobilization plans do not specify the length of the workday, the shipping capability forecast, as given by the site managers and shown in Table 6, more appropriately depicts the expected emergency environment.

The results presented previously suggest that the availability of any particular PEP depends upon where it is stored. Some PEP's, those stored mostly on-site, will be 100% delivered or enroute before M + 60 days. Conversely, PEP's with high quantity central storage are generally not available before M + 60 days.

Table 7 lists several planned producer PEP's in this category. Once again, a range of results is presented to illustrate the effects of storage site shipping priorities. Assuming that all sites concentrate all shipping resources on Army planned producer PEP's, Lake City AAP and Bell Helicopter will have 100% and 99% of their respective off-site PEP items either enroute or already delivered to the production site before M + 60 days. Then, assuming that all sites extend equal priority attention to "X-Facility" and other service PEP's as well, 99% of Lake City's items and 85% of Bell's items will be enroute or delivered. Although the Lake City and Bell PEP's fall into the high quantity in central storage category, PEP availability is expected to be good because most items are located at responsive sites.

In contrast, Chrysler and Motor Wheel will experience poor PEP availability under similarly assumed shipping conditions. If shipping resources are concentrated on Army planned producer PEP's only, approximately two-thirds of the Chrysler and Motor Wheel PEP items will be available in 60 days. If shipping resources are extended to other PEP's as well, PEP availability prospects for these producers diminish to approximately one-half of the required quantity. The limited PEP availability, in this case, can be directly attributed to the responsiveness of the sites where these PEP's are stored. Significant portions of the Chrysler and Motor Wheel PEP's are located at the pacing sites.

The effect of competition for shipping resources from the DoD General Reserve is indicated by the last column in Table 7. In general, the Army planned producers will experience very poor PEP availability if General Reserve items share equal shipping priority status with PEP items.

IPE AVAILABILITY AT SELECTED PLANNED PRODUCERS

PEP NUMBER	PLANNED PRODUCER	PERCENT OFF-SITE IPE ENROUTE OR DELIVERED IN 60 DAYS: PLND PROD PEP	ALL ARMY PEP	ALL PEP	ALL PEP & RESERVE
49	DETROIT DIESEL	83%	56%	54%	46%
53	TELEDYNE CONTINENTAL	93	80	80	58
116	LAKE CITY AAP	100	99	99	96
234	INTERCONTINENTAL	81	59	58	47
242	FIRESTONE	90	79	79	45
438	CHRYSLER	66	48	46	31
444	INTERCONTINENTAL	92	83	83	56
574	PEERLESS	93	66	65	51
581	MOTOR WHEEL	65	51	51	27
670	AVCO LYCOMING	79	57	56	35
815	BELL HELICOPTER	99	85	85	43

TABLE 7

These IPE availability estimates do not include the final link in the shipping sequence, long distance transportation. With good rail and truck service during mobilization, the availability estimates will not be adversely affected. The IPE users will experience a two-to-seven day lag period before the first machines arrive. Most IPE shipments will go by truck; therefore, this lag period is based on the shortest and longest transportation link mileage divided by an empirical transport speed, approximately 500 miles/day. An additional day is included to allow for

transport company response to initial calls for service. It should be noted that, under these conditions, site clearance will require significantly more time than will long distance transportation.

A transportation prognosis that indicates rail car/truck trailer shortages or other service disruptions, would diminish the availability of IPE. At this time, no emergency transport allocations are granted for IPE. Transport availability, therefore, is a matter for conjecture.

III. FINDINGS

Several problems are apparent in the mobilization reactivation of Army PEP's. These include:

a. Army PEP managers do not assign any type of priority for movement of packages or individual pieces from storage.

b. Army PEP managers have not established procedures to assure items other than IPE (i.e., ST/STE and OPE) are placed on standing mobilization shipping orders.

c. The review of mobilization shipping documents indicates that a large number of errors would be made if those documents were executed as they are now distributed.

d. No central inventory records exist for non-IPE that is assigned to and stored with the PEP's. The additional resources required to ship PEP non-IPE are unknown.

e. PEP movement forecasts have not been submitted to MTMC; therefore, Army IPE has no claim on emergency transportation services.

IV. CONCLUSION AND RECOMMENDATIONS

The 60-day IPE availability assumption as stated by the Assistant Secretary of Defense memorandum is not valid for Army-owned PEP's. PEP's with large off-site inventories will not totally clear the central sites until M + 130 to M + 140 days.

The following recommendations are provided:

a. Review and clarify as necessary the procedures to issue and update the mobilization shipping orders. Develop a prioritization of movement for packages and/or individual items. Develop guidance governing the availability of equipment assigned to "X-Facilities."

b. Identify and maintain control of PEP non-IPE through the establishment of a centralized data record. Assure that PEP non-IPE is placed on standing mobilization shipping orders.

c. Coordinate shipping requirements with MTMC to claim emergency transportation services and receive allocations for PEP shipments.

d. Do not apply the 60-day IPE availability assumption, across-the-board, during the negotiation of DD Form 1519 "Planning Agreements" or as a part of the contractural Data Item Description for Industrial Preparedenss Planning. Instead, each Army planned producer should be given an individual assessment of PEP availability which is adapted to the special circumstances of PEP location.

e. Develop inter-departmental agreements that provide for emergency manpower and/or equipment support to the pacing storage sites, i.e., transfer personnel and equipment from the responsive sites to assist the pacing sites.

APPENDIX A

Acronym Reference

APPENDIX A

AAP	Army Ammunition Plant
ARRCOM	US Army Armament Materiel Readiness Command
ASF	Army Storage Facility
CAB	Civil Aeronautics Board
CONUS	Continental United States
DA	Department of Army
DARCOM	US Army Materiel Development and Readiness Command
DESCOM	US Army Depot Systems Command
DID	Data Item Description
DIPEC	Defense Industrial Plant Equipment Center
DIR	Defense Industrial Reserve
DLA	Defense Logistics Agency
DLSIE	Defense Logistics Studies Information Exchange
DoD	Department of Defense
DoI	Department of Interior
DoT	Department of Transportation
DoT EO	Department of Transportation Emergency Organization
FHWA	Federal Highway Administration
FPA	Federal Preparedness Agency
IBLA	US Army Industrial Base Engineering Activity
ICC	Interstate Commerce Commission
IPE	Industrial Plant Equipment
IPP	Industrial Preparedness Planning
JCS	Joint Chiefs of Staff
MARAD	Maritime Administration
M-DAY	Mobilization Day
MTMC	Military Traffic Management Command
OPE	Other Plant Equipment
PEP	Plant Equipment Package
POE	Port of Embarkation
ST	Special Tooling
STE	Special Test Equipment
TARCOM	US Army Tank-Automotive Materiel Readiness Command

APPENDIX B

Emergency Reactivation Policy and Procedure

APPENDIX B

IPE Storage

TM38-260, Preparation of Industrial Plant Equipment for Storage or Shipment, prescribes methods, standards and materials for IPE and OPE cleaning, preservation, storage, maintenance in storage, and shipping. This technical manual deals with various means of slowing down the damaging effects of corrosive contaminants and atmospheric surroundings. It describes two types of controlled humidity storage (heated and unheated) and the preservation requirements appropriate for those conditions. The TM is oriented toward routine IPE layaway and reactivation procedures in peacetime.

Warehousing techniques are also prescribed by TM38-260. In warehousing, several guidelines do facilitate mobilization shipping capability. The consideration of the following requirements common to IPE storage is directed.

1. Equipment shall be placed in the storage area with sufficient space between adjacent items to permit surveillance inspection and to facilitate the removal of individual items.

2. The width and location of access aisles should be governed by the size of the equipment to be stored and the facilities available for handling.

3. Equipment identified to a specific end item should be grouped in the storage area.

4. Skidded components of an item of equipment should be stored adjacent to each other, and to the basic item.

5. Whenever practicable, boxed or crated accessories, attachments or tooling should be stored on, or adjacent to the basic item.

6. Boxed or crated accessories, attachments or tooling may be block-stacked separately but the locator records must indicate the relation to the basic item and a warning tag should be attached to the basic item directing attention to the stacked items.

The central storage sites generally observe these storage disciplines and each maintains a locator system to provide for the accelerated selection of IPE for emergency shipment.

Detailed guidance for IPE preservation, storage and shipment is provided by MIL-STD-107E and MIL-HDBK-701. However, these publications do not amplify the TM38-260 with regard to any special factors that influence emergency IPE reactivation.

Several publications assign responsibilities and regulate the management of the IPE inventories, active and inactive, PEP and non-PEP. Once again, instructions for emergency reactivation are sparse.

DoD Directives 4215.18, Management of Defense-Owned Industrial Plant Equipment, designates the DLA as the DoD central organization responsible for providing technical direction over central IPE storage sites to include preservation, testing and repair, overhaul or rebuild of equipment.

Chapter 4, AR 700-43, Management of Defense-Owned Industrial Plant Equipment (IPE), prescribes policy and procedure for the storage of IPE. DIPEC is charged to arrange storage for unassigned idle IPE and provide storage for PEP's, including special tooling and test equipment pertinent thereto, in central storage sites. DIPEC maintains current information on the maximum lifting and warehousing capabilities at these sites. The owning Military Service, in coordination with DIPEC, determines a central site for PEP storage, first considering the following choices:

1. Maintain the PEP in place in the facility where it was last operated.

2. Store the PEP on-site or adjacent to the point of last use.

These choices are preferred to central storage for reasons of economy of transportation and time required to reinstall the PEP. Their feasibility is often diminished, however, by a lack of storage space at or near planned producer sites and by costly storage and maintenance fees.

AR 700-43 and AR 700-90, Army Industrial Preparedness Program, both require the establishment of emergency plans for IPE shipment. AR 700-43 states that DIPEC, in coordination with DoD components, will prepare and maintain plans for emergency movement of equipment from central storage sites to scheduled usage points in the event of a national emergency or mobilization.

In the event of mobilization, DIPEC will issue shipping instructions by MILSTRIP documentation, i.e., DD Form 1348M, DD Form 1348-1, or MILSTRIP teletype format.

IPE Transportation

The 700 Series Army Regulations do not describe special handling or transportation procedures for mobilization. Guidance is directed to transport funding responsibility and shipment administration under routine circumstances. Some of the following administrative procedures in AR 700-43 will carry over into emergency operations. As discussed previously, DIPEC will direct movement of IPE by MILSTRIP. In addition, the Military Departments, as responsible administering activities for PLP's, will instruct the consignor, i.e., the central storage sites, to:

1. Prepare the equipment and the Historical Record including technical data for shipment.

2. Request carrier services and bills of lading from the designated transportation office. The transportation officer will furnish the appropriate carrier service, furnish bills of lading, and obtain transportation to destination in accordance with DIPEC shipping instructions and applicable transportation regulations.

3. Accomplish transfer and reporting.

According to AR 55-355, Military Traffic Management Regulation, plans for national emergencies have been developed or are being developed to manage transportation resources under conditions of international tension, flood, earthquake, local disaster, limited war outside CONUS, or general war including massive nuclear bombing.

Provision of transportation services at the installation level, in particular, immediately becomes more complex. Regulatory agencies will enforce appropriate control measures such as allocations, priorities, permits, sanctions, and embargoes.

The MTMC Basic Emergency Plan provides guidance to elements of MTMC and transportation elements of the military establishments for the execution of military traffic management functions within CONUS and for the operation of MTMC under all emergency conditions. Upon loss of communication with MTMC headquarters, MTMC area commanders have temporary authority to effect procedures necessary to insure the movement of DoD traffic. This delegated authority terminates when contact with MTMC headquarters or alternate headquarters is restored.

Regional jurisdiction will also be established for other departments and agencies that have major responsibilities affecting the commercial transportation of DoD cargo. Ten Federal Preparedness Agency (FPA) regions have been established in CONUS to supervise the emergency plans and preparedness programs of the DoD, Department of Transportation (DoT), the Civil Aeronautics Board (CAB), the Department of the Interior (DoI), the Federal Highway Administration (FHWA), the Interstate Commerce Commission (ICC), and the Maritime Administration (MARAD). The FPA supervision and coordination mission at the regional level will be directed by an Office of Defense Resources, with FPA personnel forming the nucleus staff. DoT will also establish Emergency Organization (EO) Regional Offices. DoT EO regional boundaries nearly coincide with those of the ten FPA regions.

The AR 55-355 contains a full range of emergency procedures for shipping military consignments. For the sake of brevity, the responsibilites of the other Government agencies and the expected effects of their transport controls will not be discussed here.

It is appropriate, however, to describe certain functional relationships within DoD and between DoD and DoT. AR 55-36, DoD Use of Domestic Civil Transportation Under Emergency Conditions, outlines assigned command and reporting channels and prescribes data elements to be included in the submission of emergency transportation requirements.

The military departments develop and submit their domestic civil transportation requirements to the Commander, MTMC according to the schedule contained in Appendix C, AR 55-36.

MTMC consolidates and evaluates the requirements, then submits them with analyses indicating shortages of capability and recommended courses of action to the Joint Chiefs of Staff (JCS).

JCS reviews MTMC findings and requests the Assistant Secretary of Defense (Manpower, Reserve Affairs & Logistics) (ASD [MRA&L]) to make a claim for transportation capability.

The ASD (MRA&L) analyzes and approves DoD civil transportation requirements received from the JCS and presents them to the DoT.

The Secretary of Transportation provides for the integrated control of all modes of commercial transportation and for the determination of the proper apportionment and allocation of the total civil transportation capacity to meet overall essential civilian and military needs. When DoD requirements exceed capacity, DoT returns allocations to the ASD (MRA&L).

ASD (MRA&L) returns these allocations with appropriate comments to the JCS.

JCS determines the relative urgency of the requirements, then suballocates the domestic civil capacity made available by DoT to the DoD components.

After suballocation, MTMC manages the movement of traffic in conformance with established movement priorities in coordination with the DoD components. The MTMC provides statistics on MTMC controlled traffic to the DoD components, at their request.

This reporting system functions within a chain of command that considers the exigencies of mobilization transportation. The operating level provides input in the form of requirements and receives feedback in the form of allocations and statistical data. At this time, no input, no claim for emergency transportation capacity for IPE shipment, has been made by the Army or by DIPEC on Army's behalf. As a result of this omission, there is no allocation for Army IPE.

Procedures are available to include IPE. Submission requirements are outlined by Appendix B, Emergency Military Requirements for Domestic Civil

transportation (RCS MTMC-30), of AR 55-36. The following items of information for IPE shipping requirements can be furnished to MTMC. The numerical sequence should be observed with items that are not applicable indicated by "N/A".

Information for items 1, 2, 5, 7, and 8 are mandatory.

1. Point of origin or FPA origin region.

2. Date available for movement (month, year).

3. Passengers. Indicated code "PX" and number of passengers.

4. Mode and type of passenger equipment requested.

5. Commodities. Indicate appropriate code and number of short tons for each of the Commodities moved.

G - General	B - Bulk Granular
A - Ammunition	Y - Bulk POL
M - Missiles	H - Bulk Hazardous
V - Vehicles	F - Bulk Gaseous
R - Refrigerated	Z - Oversize NOTE: (exceeding 40' in length, 10' in width, 10' in height in any dimension) or overweight (exceeding 80,000 lbs). (Dimensions and weight of commodities referred to are for exclusive use of MTMC evaluation of rail equipment requirements).

6. Mode requested. Designate type of equipment only if peculiar to the requirement.

7. Priority. Indicate code "P" and appropriate priority code from sections I and II, Appendix D.

8. The CONUS destination, FPA destination region, or port of embarkation (POE).

9. Destination deadline delivery date. Show date (month, year) applicable to destination in paragraph 8, above.

Item 7 refers to Appendix D for determination of priority. The descriptions for Transportation Priority applies to emergency IPE shipments because this materiel is of such importance that: "It is required by industrial production activities engaged in repair, modification, or manufacture of primary weapons, equipment, and supplies to prevent an impending work stoppage or to reinstitute production in the event a stoppage has already

occurred or when the material is required to accomplish emergency or controlling jobs." IPE movement, therefore, is considered as important as the movement of materiel destined for US forces in combat and those staged for immediate combat or direct combat support.

APPENDIX C

PEP IPE Breakout by:

* PEP Number
* Inventory Quantity by Status Code
* Inventory Quantity at Central Storage Sites

PEP's MANAGED BY ARMY
PRIOR TO MARCH 1978

1/ PEP#	IPE QUANTITY BY STATUS CODE (1) ACTIVE	(2) INTRANSIT	(3) RESERVE	2/ RESERVE IPE QTY AT STORAGE SITES	PERCENT RESERVE IPE QTY AT STORAGE SITES
TC37	0	0	0	0	0
43	0	0	3	0	0
49	6	4	761	758	99.6
53	0	0	342	338	98.8
59	0	0	9	7	77.7
65	12	0	1	0	0
69	4	0	124	13	10.5
71	0	0	27	27	100.0
72	0	0	3	0	0
76	2	0	16	16	100.0
83	0	0	170	166	97.6
85	1	0	100	26	26.0
95-X	0	0	111	109	98.2
98	23	0	175	24	13.7
109	78	0	277	16	5.8
111	4	0	122	1	0.8
112	48	0	192	0	0
113	9	0	433	0	0
114	36	0	106	1	0.9
116	922	0	1311	849	64.8
117	140	0	539	1	0.2
119	67	0	416	6	1.4
120	73	0	282	3	1.1
122	0	0	146	2	1.4
125	26	0	2864	365	12.7
127	8	0	5	5	100.0
130	0	0	9	9	100.0
132	0	0	21	21	100.0
149	0	0	31	0	0
154	0	0	3	0	0
158	0	0	43	43	100.0
164	0	0	692	24	3.5
167	0	0	76	12	26.1
191-X	0	0	64	60 3/	93.8
192-X	0	0	72	72	100.0
196	0	0	653	198	30.3
200	1	0	39	39	100.0
204-X	8	0	127	126	99.2
208	0	0	136	118	86.8
209	53	0	156	2	1.3
211-X	0	0	207	207	100.0
217-X	0	0	115	115	100.0
219	0	0	15	15	100.0
221-X	0	0	112	107	95.5
224	27	0	545	63	11.6

1/ PEP#	IPE QUANTITY BY STATUS CODE (1) ACTIVE	(2) INTRANSIT	(3) RESERVE	2/ RESERVE IPE QTY AT STORAGE SITES	PERCENT RESERVE IPE QTY AT STORAGE SITES
227	9	0	23	11	47.8
230-X	21	0	93	93	100.0
234	2	3	410	410	100.0
237	0	0	101	101	100.0
242	0	0	245	240	98.0
253	1	0	117	1	0.9
254	0	0	1	0	0
257	76	0	150	2	1.3
260	141	0	747	0	0
261	13	0	81	7	8.6
262	1	0	6	0	0
263	0	0	52	0	0
399	20	0	85	14	16.5
415-X	0	0	44	44	100.0
418-X	0	0	90	37 4/	41.1
420-X	0	0	112	108 5/	96.4
422	208	0	234	19	8.1
423-X	0	0	30	30	100.0
425-X	0	0	139	139	100.0
428-X	0	0	93	89	95.7
430	0	0	65	1	1.5
436	65	0	205	75	36.6
437-X	0	0	48	45	93.8
438	460	210	2016	1967	97.6
443	2	0	32	30	93.8
444	0	0	284	284	100.0
445-X	0	1	175	175	100.0
447-X	0	0	13	13	100.0
449-X	0	0	73	73	100.0
455	305	4	145	64	44.1
457	0	6	181	14	7.7
459	206	0	163	15	9.2
461	0	0	366	286 6/	78.1
463	0	0	50	49	98.0
465	1	0	69	11	15.9
468-X	0	0	82	82	100.0
472	26	0	281	197	70.1
489	0	0	8	0	0
495	0	0	13	13	100.0
515	0	0	209	0	0
518-X	0	1	27	27	100.0
561	370	4	79	29 7/	36.7
568-X	0	0	84	84	100.0
570-X	0	0	162	158	97.5
571	0	71	77	47 8/	61.0
573	0	0	21	21	100.0

1/ PEP#	IPE QUANTITY BY STATUS CODE (1) ACTIVE	(2) INTRANSIT	(3) RESERVE	2/ RESERVE IPE QTY AT STORAGE SITES	PERCENT RESERVE IPE QTY AT STORAGE SITES
574	0	0	181	181	100.0
581	0	0	118	118	100.0
583	0	0	101	0	0
586-X	0	0	23	23	100.0
587-X	0	0	74	47 9/	63.5
589	3	0	190	10	5.3
591	4	0	5	3	60.0
593-X	0	0	77	77	100.0
596-X	0	0	58	58	100.0
598	0	0	11	11	100.0
600	50	3	213	74	34.7
601-X	0	0	110	110	100.0
602	22	1	145	141	97.2
610	0	0	188	0	0
611	0	1	49	49	100.0
620-X	0	0	105	76 10/	72.4
634	0	0	269	118	43.9
643	0	0	113	111	98.2
[illegible]	0	0	15	15	100.0
652-X	0	0	78	3 11/	3.8
654-X	5	0	37	37	100.0
656	0	0	9	4	44.4
669-X	0	0	293	293	100.0
670	1	0	566	545	96.3
720-X	0	2	273	273	100.0
721	4	0	6	6	100.0
726	1	0	37	1	2.7
727	17	0	562	177	31.5
732	0	0	11	0	0
733-X	0	0	24	24	100.0
734-X	0	0	23	23	100.0
735	16	0	0	0	0
736-X	0	0	44	44	100.0
737	12	1	180	143	79.4
740	124	0	119	0	0
741-X	0	0	266	265	99.6
742	0	0	172	171	99.4
744	0	0	48	7	14.6
746-X	0	0	65	65	100.0
748	6	0	95	0	0
749-X	0	0	15	15	100.0
754-X	0	0	27	27	100.0
755	0	0	336	7	2.1
757	0	0	81	16	19.8
758	8	0	146	27	18.5
759	0	0	109	38 12/	34.5
760	0	0	66	0	0
762	0	0	18	0	0

1/ PEP#	IPE QUANTITY BY STATUS CODE (1) ACTIVE	(2) INTRANSIT	(3) RESERVE	2/ RESERVE IPE QTY AT STORAGE SITES	PERCENT RESERVE IPE QTY AT STORAGE SITES
763	0	0	138	137	99.3
764	1130	0	33	0	0
765-X	0	0	15	15	100.0
766	14	0	5	5	100.0
768	5	2	82	22	26.8
771-X	0	0	34	34	100.0
772	0	0	10	10	100.0
773	2	0	56	19	33.9
775-X	0	0	4	4	100.0
777	10	0	48	4	8.3
780	0	0	83	33	39.8
781	0	0	8	0	0
786	0	0	18	0	0
787-X	0	0	39	39	100.0
790	0	0	23	0	0
791-X	0	0	315	311	98.7
793	0	0	194	3	1.5
794	0	0	20	2	10.0
795-X	0	0	30	30	100.0
798-X	1	0	809	781 13/	96.5
799	0	0	70	70	100.0
801	0	0	7	0	0
804	3	0	14	4	28.6
805	1	0	2	1	50.0
806	0	0	82	82	100.0
807-X	0	0	59	59	100.0
808	0	0	20	0	0
809	0	0	58	0	0
810	18	0	102	0	0
815	0	2	311	311	100.0
817	0	0	6	0	0
818	2	0	6	5	83.3
819	0	0	2	0	0
825	8	0	134	9	6.7
832	35	0	2	0	0
837	4	0	15	12	80.0
842	0	0	49	7	14.3
843	0	0	58	0	0
846	234	0	65	59	90.8
853	1	0	48	1	2.1
862	0	0	1	1	100.0
866	0	0	13	0	0
871	0	0	11	0	0
GRAND TOT	5216	316	28282	14511	51.4
X-FAC TOT	34	4	4968	4726	95.2
REMAINDER	5182	312	23314	9785	42.0

FOOTNOTES:

1. Suffix (-X) denotes an X-Facility PEP.
2. Reserve IPE not stored at the nine selected storage sites is stored primarily at the producer site except as footnoted.
3. Additional off-site storage at Crane, Indiana.
4. Additional off-site storage at Middletown, Iowa.
5. Additional off-site storage at Middletown, Iowa.
6. Additional off-site storage at New Brighton, Minnesota.
7. Additional off-site storage at Bideford, Maine.
8. Additional off-site storage at Newport, Indiana.
9. Additional off-site storage at Middletown, Iowa.
10. Additional off-site storage at Newport, Indiana.
11. Additional off-site storage at Berwick, Pennsylvania.
12. Additional off-site storage at New Brighton, Minnesota.
13. Additional off-site storage at Burlington, Vermont.

GENERAL FOOTNOTE: The source of this data is the DIPEC SP-6 printout, dated 31 March 1978. Data for PEP's 735 (BMY) and 764 (AVCO) did not appear in the SP-6. Therefore, the FY79 PBP is the source document.

APPENDIX D

PEP IPE Breakout by:

* PEP Number
* Inventory Quantity
* Inventory Quantity at Central Storage Sites

PEP's AQUIRED OR ESTABLISHED
BY ARMY SINCE MARCH 1978

PEP #	IPE QUANTITY	IPE QTY AT STORAGE SITES 1/		% IPE QTY AT STORAGE SITES
674	11	0		0
725	142	68	2/	47.9
743	90	0		0
747	17	0		0
752	168	0		0
770	162	16		9.9
783	22	0		0
813	60	0		0
823	31	0		0
824	7	6		85.7
830	14	0		0
831	63	0		0
839	166	110		66.3
857	37	0		0
858	126	0		0
863	23	0		0
1000	429	0		0
1001	536	0		0
1002	843	0		0
	2947	200		

NOTES: PEP #674 thru #863 were transferred from Navy to Army in March 1978. PEP #1000, 1001 and 1002 were established at Hawthorne AAP, McAlester AAP and Crane AAA, respectively.

1. IPE not stored at the eight selected storage sites is stored at the producer site except as footnoted.

2. Additional storage (53 items) at Crane, IN.

3. Additional storage (1 item) at Vernon, CA.

SOURCE: July 1978 RCS: DD-I&L(AR)642, Management of Defense--Owned Industrial Plant Equipment Package Status Report, prepared by ARRCOM for the recently acquired packages.

30 September 1978 RCS: DIPEC-SS-2, Planning Data for Plant Equipment Packages, for the recently established packages.

APPENDIX E

PEP Shipment Data by:

* Central Storage Site
* PEP Number
* PEP Quantity
* Destination

DIPEF Atchison - Atchison, Kansas

Shipment data* for IPE to localities within Federal Preparedness Agency Regions.

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
561	4	Maremont	Saco, ME	1500 miles
670	11	AVCO	Wilmington, MA	1442
422	3	Chamberlain	New Bedford, MA	1439
461	35	Olin	New Haven, CT	1306
758	2	Gen Time	Thomaston, CT	1292
463	1	Scovill	Waterbury, CT	1292
196	2	Timex	Watertown, CT	

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
472	20	WVA	Watervliet, NY	1257
763	19	Bulova	Valley Stream, NY	1236
780	1	REDM	Wayne, NJ	
805	1	Anaconda	Buffalo, NY	

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
602	69	Flinchbaugh	Red Lion, PA	1085
132	5	Blaw-Knox	Wheeling, WV	882
209	2	SAAP	Scranton, PA	
755	1	HAAP	Pittsburg, PA	
130	2	Bucyrus Erie	Glassport, PA	

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
759	18	Dayron	Orlando, FL	1234
634	106	FMC	Anniston, AL	822
227	3	Temco	Nashville, TN	641
773	2	Etowah	Gadsden, AL	

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
589	3	Weatherhead	Cleveland, OH	810
438	137	Chrysler	Warren, MI	757

*Source Documents for this appendix are the same as those used for Appendix C and D. Highway mileage from each storage site to each PEP user was recorded from AR 55-60, Official Table of Distances.

Region 5 cont'd

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
651	4	Assc Spring	Plymouth, MI	757
581	9	Motor Wheel	Lansing, MI	698
85	15	Clark	Columbus, OH	670
643	7	Kelsey Hayes	Jackson, MI	658
53	148	Teledyne	Muskegon, MI	657
76	16	Scott Fetzer	Bronson, MI	634
459	6	Presto	Eau Claire, WI	518
49	26	DD (GMC)	Indianapolis, IN	508
571	9	Stewart Warner	Lebanon, IN	488
574	10	Peerless	Chicago, IL	487
72	3	Borg Warner	Bellwood, IL	487
200	3	Ekco	Chicago, IL	487
436	3	Gen Time	Peru, IL	448
600	21	Honeywell	New Brighton, MN	428
125	286	TCAAP	New Brighton, MN	428
727	29	RIA	Rock Island, IL	358
69	7	Olin	E. Alton, IL	309
573	2	Amer Home	Canton, OH	
737	1	Amron	Antigo, WI	
109	1	IAAP	Charlestown, IN	
122	1	RAAP	Ravenna, OH	
219	1	E. Walters	Elk Grove Village, IL	
127	2	Torrington	South Bend, IN	
777	1	Gen Time	Rolling Meadows, IL	
242	47	Firestone	Akron, OH	

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
455	16	Chamberlain	Waterloo, IA	290
83	7	Maytag	Newton, IA	208
116	809	LCAAP	Independence, MO	59
768	1	Kisco	St. Louis, MO	305
793	1	GAAP	St. Louis, MO	
164	2	SLAAP	St. Louis, MO	
114	1	KAAP	Parsons, KS	

Region 7

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
815	95	Bell	Ft. Worth, TX	559
234	33	Intercont.	Garland, TX	542
444	109	Intercont.	Garland, TX	542
167	2	Rheem	New Orleans, LA	
770	1	Marathon	Longview, TX	

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
237	10	Remco	Willits, CA	1902
611	2	Remco	Willits, CA	1902
806	10	Remco	Willits, CA	1902
465	6	Wells	Costa Mesa, CA	1600
457	8	Silent	Long Beach, CA	1600
158	20	Talley	Mesa, AZ	1256
742	1	FMC	San Jose, CA	
98	1	Norris	Los Angeles, CA	

X-Facility

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
741	1	791	4	428	73
746	58	445	58	449	14
749	15	447	11	518	8
754	27	669	1	568	3
765	1	798	620	570	18
787	37	425	7	586	1
587	5	734	20	217	105
593	12	736	4	221	10
596	46	95	13	230	17
601	3	191	12	415	31
620	6	211	2	418	12
862	1	771	8	420	11

Ravenna Army Ammunition Plant - Ravenna, OH

Shipment date for IPE to localities within Federal Preparedness Agency Regions.

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
561	1	Maremont	Saco, ME	720 miles
670	56	AVCO	Wilmington, MA	657
196	65	Timex	Watertown, CT	512

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
763	1	Bulova	Valley Stream, NY	450
780	28	REDM	Wayne, NJ	429

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
130	4	Bucyrus Erie	Glassport, PA	532
755	2	HAAP	Pittsburgh, PA	532
602	10	Flinchbaugh	Red Lion, PA	325

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
759	14	Dayron	Orlando, FL	1022
634	1	FMC	Anniston, AL	716
773	2	Etowah	Gadsden, AL	687
227	2	Temco	Nashville, TN	512

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
125	3	TCAAP	New Brighton, MN	777
459	1	Presto	Eau Claire, WI	683
737	103	Amron	Antigo, WI	548
727	1	RIA	Rock Island, IL	511
436	10	Gen Time	Peru, IL	454
574	123	Peerless	Chicago, IL	364

Region 5 cont'd

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
200	21	Ekco	Chicago, IL	364
53	35	Teledyne	Muskegon, MI	342
571	18	Stewart Warner	Lebanon, IN	322
49	459	DD (GMC)	Indianapolis, IN	302
643	76	Kelsey Hayes	Jackson, MI	214
438	262	Chrysler	Warren, MI	200
772	1	Grand Machining	Detroit, MI	200
85	2	Clark	Columbus, OH	138
589	27	Weatherhead	Cleveland, OH	39
573	17	Amer Home	Canton, OH	23
242	35	Firestone	Akron, OH	10

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
111	1	CAAP	Grand Island, NB	361
116	1	LCAAP	Independence, MO	800
83	48	Maytag	Newton, IA	677
455	10	Chamberlain	Waterloo, IA	629

Region 7

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
234	195	Intercont.	Garland, TX	1163
444	20	Intercont.	Garland, TX	1163
117	1	LSAAP	Texarkana, TX	1080
119	1	LAAP	Shreveport, LA	1060
167	2	Rheem	New Orleans, LA	1052

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
806	14	Remco	Willits, CA	2499
237	41	Remco	Willits, CA	2499
611	11	Remco	Willits, CA	2499
98	18	Norris	Los Angeles, CA	2390

X-Facility

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
445	24	418	3	587	12
95	14	420	36	593	42
191	3	425	6	601	29
204	24	428	1	620	5
217	3	449	41	652	3
221	86	568	76	736	1
230	11	570	97	791	1
415	2	586	18	807	2
720	232				

Pontiac Storage Facility - Pontiac, Michigan

Shipment data for IPE to localities within Federal Preparedness Agency Regions.

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
196	78	Timex	Watertown, CT	667 miles

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
763	4	Bulova	Valley Stream, NY	649
472	35	WVA	Watervliet, NY	558

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
602	2	Flinchbaugh	Red Lion, PA	531
130	1	Bucyrus - Erie	Glassport, PA	326
755	1	HAAP	Pittsburgh, PA	326

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
634	3	FMC	Anniston, AL	779
773	1	Etowah	Gadsden, AL	750
227	1	Temco	Nashville, TN	

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
737	1	Amron	Antigo, WI	552
436	22	Gen Time	Peru, IL	378
571	2	Stewart Warner	Lebanon, IN	340
49	138	DD (GMC)	Indianapolis, IN	320
71	20	Natl. Distiller	Indianapolis, IN	320
574	10	Peerless	Chicago, IL	278
85	4	Clark	Columbus, OH	241
242	27	Firestone	Akron, OH	221
127	1	Torrington	South Bend, IN	209

(NOTE: Plus 400 items formerly stored at Lima AMC. These items will be used in Region 5.)

Region 5 continued

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
589	1	Weatherhead	Cleveland, OH	204
53	31	Teledyne	Muskegon, MI	154
643	6	Kelsey Hayes	Jackson, MI	70
581	66	Motor Wheel	Lansing, MI	69
438	451	Chrysler	Warren, MI	31
651	7	Assc Spring	Plymouth, MI	31
804	4	Revere	Detroit, MI	31
125	1	TCAAP	New Brighton, MN	

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
455	4	Chamberlain	Waterloo, IA	543
164	10	SLAAP	St. Louis, MO	

Region 7

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
815	4	Bell	Ft. Worth, TX	1224
234	108	Intercont.	Garland, TX	1192
444	31	Intercont.	Garland, TX	1192

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
237	21	Remco	Willits, CA	2422
611	18	Remco	Willits, CA	2422
806	12	Remco	Willits, CA	2422
224	1	RAAP	Riverbank, CA	2376
465	2	Wells	Costa Mesa, CA	2318
842	2	Martin Marietta	Torrance, CA	2318
721	1	Barry Miller	Irvine, CA	2318

X-Facility

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
445	17	204	2	420	1
669	288	211	1	425	104
798	2	221	2	428	1
95	4	227	1	437	38
191	7	230	32	449	4

X-Facility continued

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
570	1	418	8	586	1
587	6	593	2	601	2
620	3	736	1	741	260
746	3			795	28

Seneca Army Depot - Romulus, New York

Shipment data for IPE to localities within Federal Preparedness Agency Regions.

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
561	5	Maremont	Saco, ME	419 miles
818	5	TI	Attleboro, MA	365
670	397	AVCO	Wilmington, MA	360
853	1	GE	Burlington, VT	335
461	242	Olin	New Haven, CT	333
846	59	Colt	Hartford, CT	306
463	47	Scovill	Waterbury, CT	304
196	26	Timex	Watertown, CT	304
598	11	Plumb & Atwood	Thomaston, CT	304
495	13	Amer Optical	Keene, NH	289
591	3	Int. Silver	Meriden, CT	270

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
763	4	Bulova	Valley Stream, NY	305
472	77	WVA	Watervliet, NY	195

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
132	4	Blaw Knox	Wheeling, WV	356
430	1	Catalyst	Baltimore, MD	273
602	32	Flinchbaugh	Red Lion, PA	225
399	2	Hamilton	Lancaster, PA	205
837	12	Boeing	Philadelphia, PA	204
766	2	Medico	Wilkes Barre, PA	150
656	4	Geo. Garrett	Philadelphia, PA	204

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
634	3	FMC	Anniston, AL	978
773	4	Etowah	Gadsden, AL	949
227	2	Temco	Nashville, TN	794

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
600	1	Honeywell	New Brighton, MN	1060
459	1	Presto	Eau Claire, WI	976
69	3	Olin	E. Alton, IL	835
436	9	Gen Time	Peru, IL	747
574	6	Peerless	Chicago, IL	657
219	3	E. Walters	Elk Grove Village, IL	657
200	2	Ekco	Chicago, IL	657
571	3	Stewart Warner	Lebanon, IN	614
71	7	Natl Distillers	Indianapolis, IN	594
49	3	DD (GMC)	Indianapolis, IN	594
53	12	Teledyne	Muskegon, MI	538
581	2	Motor Wheel	Lansing, MI	453
643	2	Kelsey Hayes	Jackson, MI	451
85	3	Clark	Columbus, OH	425
438	104	Chrysler	Warren, MI	389
242	26	Firestone	Akron, OH	304
589	4	Weatherhead	Cleveland, OH	303

(NOTE: Plus 173 items formerly stored at Lima AMC. These items will be used in Region 5.)

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
116	8	LCAAP	Independence, MO	1101
455	1	Chamberlain	Waterloo, IA	900
768	11	Kisco	St. Louis, MO	860

Region 7

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
443	19	Cabot	Pampa, TX	1576
234	19	Intercont.	Garland, TX	1500
444	11	Intercont.	Garland, TX	1500
167	8	Rheem	New Orleans, LA	1355
770	13	Marathon	Longview, TX	

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
806	1	Remco	Willits, CA	2797
224	1	RAAP	Riverbank, CA	2745
208	34	Lear Siegler	Anaheim, CA	2687
721	5	Barry Miller	Irvine, CA	2687
465	1	Wells	Costa Mesa, CA	2687
158	2	Talley	Mesa, AZ	2358

X-Facility

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
445	11	230	3	593	14
654	37	418	2	596	11
798	2	420	3	620	4
95	58	428	1	733	24
191	3	437	3	734	3
204	36	449	3	741	1
211	193	568	1	765	14
217	3	570	6	771	3
791	1	518	2	787	2
798	2	807	50		
192	67				

Defense Deport Mechanicsburg - Mechanicsburg, PA

Shipment data for IPE to localities within

Federal Preparedness Agency Regions

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
561	9	Maremont	Saco, ME	487 miles
670	37	AVCO	Wilmington, MA	397
422	8	Chamberlain	New Bedford, MA	386
758	24	Gen Time	Thomaston, CT	268
196	19	Timex	Watertown, CT	268
461	8	Olin	New Haven, CT	254

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
472	34	WVA	Watervliet, NY	304
763	85	Bulova	Valley Steram, NY	179
726	1	ARRADCOM	Dover, NJ	

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
132	1	Blaw-Knox	Wheeling, WV	231
130	1	Bucyrus-Erie	Glassport, PA	193
755	1	HAAP	Pittsburg, PA	193
766	3	Medico	Wilkes Barre, PA	112
602	12	Flinchbaugh	Red Lion, PA	28
59	6	BMY	York, PA	28
824	4	Lansdown	Morton, PA	
839	110	GTE Sylvania	Emporium, PA	

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
759	3	Dayron	Orlando, FL	983
120	1	MAAP	Milan, TN	807
634	3	FMC	Anniston, AL	769
773	3	Etowah	Gadsden, AL	740
757	16	Gen Time	Gadsden, AL	740
227	2	Temco	Nashville, TN	707

Region 5

125	23	TCAAP	New Brighton, MN	1051
600	16	Honeywell	New Brighton, MN	1051

Region 5 (Cont'd)

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
459	1	Presto	Eau Claire, WI	956
69	3	Olin	E. Alton, IL	790
727	60	RIA	Rock Island, IL	787
436	43	Gen Time	Peru, IL	728
200	4	Ekco	Chicago, IL	638
219	4	E. Walters	Elk Grove Village, IL	638
574	9	Peerless	Chicago, IL	638
777	2	Gen Time	Rolling Meadows, IL	638
799	1	Bell & Howell	Chicago, IL	638
53	44	Teledyne	Muskegon, MI	614
571	6	Stewart Warner	Lebanon, IN	565
109	1	IAAP	Charlestown, IN	564
127	1	Torrington	South Bend, IN	558
49	16	DD (GMC)	Indianapolis, IN	545
581	10	Motor Wheel	Lansing, MI	529
643	8	Kelsey Hayes	Jackson, MI	486
438	146	Chrysler	Warren, MI	472
772	7	Grand Machining	Detroit, MI	472
589	2	Weatherhead	Cleveland, OH	316
573	1	Amer Home	Canton, OH	286
242	10	Firestone	Akron, OH	297
737	1	Amron	Antigo, WI	
651	4	Assc. Spring	Plymouth, MI	
725	67	KDI	Cincinnati, OH	

Region 6

261	3	SAAP	Lawrence, KS	1064
116	19	LCAAP	Independence, MO	1037
83	36	Maytag	Newton, IA	951
455	14	Chamberlain	Waterloo, IA	903
768	7	Kisco	St. Louis, MO	790
164	1	SLAAP	St. Louis, MO	790
793	1	GAAP	St. Louis, MO	790

Region 7

443	1	Cabot	Pampa, TX	1506
815	67	Bell	Ft. Worth, TX	1400
444	23	Intercontinental	Garland, TX	1183
119	3	LAAP	Shreveport, LA	1250
744	2	Norris	Shreveport, LA	1250

Region 9

742	1	FMC	San Jose, CA	2808
237	10	Remco	Willits, CA	2773
806	7	Remco	Willits, CA	2773
611	5	Remco	Willits, CA	2773
224	2	RAAP	Riverbank, CA	2727
208	75	Lear Siegler	Anaheim, CA	2627
98	4	Norris	Los Angeles, CA	2627
158	3	Talley	Mesa, AZ	2293

X-Facility

PEP #	PEP QTY
95	10
191	4
204	11
211	4
217	3
221	1
239	18
415	2
418	5
420	8
423	4
192	4

PEP #	PEP QTY
425	10
428	5
449	4
468	1
518	9
568	1
570	15
586	1
587	8
593	3
596	1
230	18

PEP #	PEP QTY
620	2
736	14
746	1
791	1
795	2
807	2
445	34
447	2
669	3
799	67
601	4
741	2
771	7

Defense Depot Tracy - Stockton, California

Shipment data for IPE to localities within Federal Preparedness Agency Regions.

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
561	2	Maremont	Saco, ME	3141 miles
422	4	Chamberlain	New Bedford, MA	3086
670	7	AVCO	Wilmington, MA	3082
196	2	Timex	Watertown, CT	2960
461	1	Olin	New Haven, CT	2954

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
472	16	WVA	Watervliet, NY	2917
763	9	Bulova	Valley Stream, NY	2888

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
132	1	Blaw-Knox	Wheeling, WV	2534
602	12	Flinchbaugh	Red Lion, PA	2534
755	3	HAAP	Pittsburgh, PA	2534

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
759	1	Dayron	Orlando, FL	2774
634	3	FMC	Anniston, AL	2331
773	4	Etowah	Gadsden, AL	2302
120	1	MAAP	Milan, TN	2115

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
242	87	Firestone	Akron, OH	2443
589	2	Weatherhead	Cleveland, OH	2442
438	88	Chrysler	Warren, MI	2372
643	4	Kelsey Hayes	Jackson, MI	2330
581	13	Motor Wheel	Lansing, MI	2313
109	4	IAAP	Charlestown, IN	2308

Region 5 (Cont'd)

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
53	12	Teledyne	Muskegon, MI	2292
571	3	Stewart Warner	Lebanon, IN	2250
737	2	Amron	Antigo, WI	2240
49	8	DD (GMC)	Indianapolis, IN	2230
200	7	Ekco	Chicago, IL	2112
574	5	Peerless	Chicago, IL	2112
219	2	E. Walters	Elk Grove Village, IL	2112
777	1	Gen Time	Rolling Meadows, IL	2112
253	1	BAAP	Baraboo, WI	2088
459	1	Presto	Eau Claire, WI	2017
727	27	RIA	Rock Island, IL	1946
125	27	TCAAP	New Brighton, MN	1927
600	13	Honeywell	New Brighton, MN	1927

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
164	8	SLAAP	St. Louis, MO	2055
768	6	Kisco	St. Louis, MO	2055
793	1	GAAP	St. Louis, MO	2055
116	3	LCAAP	Independence, MO	1803
83	7	Maytag	Newton, IA	1796
261	2	SAAP	Lawrence, KS	1764

Region 7

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
744	3	Norris	Shreveport, LA	1872
119	2	LAAP	Shreveport, LA	1872
444	53	Intercont.	Garland, TX	1685
234	21	Intercont.	Garland, TX	1685
815	29	Bell	Ft. Worth, TX	1654
770	1	Marathon	Longview, TX	

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
158	6	Talley	Mesa, AZ	701
457	6	Silent	Long Beach, CA	338
842	3	Martin Marietta	Torrance, CA	338
98	1	Norris	Los Angeles, CA	338
806	22	Remco	Willits, CA	200
611	8	Remco	Willits, CA	200
237	7	Remco	Willits, CA	200
224	58	RAAP	Riverbank, CA	10
742	166	FMC	San Jose, CA	81

X-Facility

PEP #	PEP QTY
445	14
798	30
95	2
191	8
204	4
211	2
593	2
741	1
771	3

PEF #	PEP QTY
217	3
221	1
230	4
415	3
418	2
420	2
620	3
423	26
791	300

PEP #	PEP QTY
425	2
428	4
437	2
449	4
518	2
570	10
736	2
807	1

Defense Construction Supply Center - Columbus, OH

Shipment data for IPE to localities within Federal Preparedness Agency Regions

Region 1

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
561	8	Maremont	Saco, ME	841 miles
670	37	AVCO	Wilmington, MA	761
422	4	Chamberlain	New Bedford, MA	750
196	6	Timex	Watertown, CT	632
463	1	Scovill	Waterbury, CT	632
758	1	Gen Time	Thomaston, CT	632

Region 2

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
472	15	WVA	Watervliet, NY	617
763	14	Bulova	Valley Stream, NY	543
780	4	REDM	Wayne, NJ	543

Region 3

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
399	12	Hamilton	Lancaster, PA	406
602	4	Flinchbaugh	Red Lion, PA	392
59	1	BMY	York, PA	392
130	1	Bucyrus-Erie	Glassport, PA	189
755	1	HAAP	Pittsburg, PA	189
132	6	Blaw-Knox	Wheeling, WV	133
824	2	Lansdowne	Morton, PA	

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
759	2	Dayron	Orlando, FL	1003
794	2	Amer Gear	Conway, SC	661
634	5	FMC	Anniston, AL	594
773	3	Etowah	Gadsden, AL	565
120	1	MAAP	Milan, TN	480
227	1	Temco	Nashville, TN	380

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
125	25	TCAAP	New Brighton, MN	729
600	23	Honeywell	New Brighton, MN	729

Region 5 (Cont'd)

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
459	4	Presto	Eau Claire, WI	624
737	35	Amron	Antigo, WI	590
727	60	RIA	Rock Island, IL	465
436	2	Gen Time	Peru, IL	442
200	2	Ekco	Chicago, IL	352
219	5	E. Walters	Elk Grove Village, IL	352
574	13	Peerless	Chicago, IL	352
799	1	Bell & Howell	Chicago, IL	352
53	53	Teledyne	Muskegon, MI	348
581	15	Motor Wheel	Lansing, MI	263
127	1	Torrington	South Bend, IN	249
643	8	Kelsey Hayes	Jackson, MI	220
438	122	Chrysler	Warren, MI	210
571	6	Stewart Warner	Lebanon, IN	204
772	2	Grand Machining	Detroit, MI	210
109	10	IAAP	Charlestown, IN	207
49	23	DD (GMC)	Indianapolis, IN	184
122	1	RAAP	Ravenna, OH	143
242	8	Firestone	Akron, OH	133
573	1	Amer Home	Canton, OH	131
85	2	Clark	Columbus, OH	6
725	1	KDE	Cincinnati, OH	

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
261	2	SAAP	Lawrence, KS	703
116	9	LCAAP	Independence, MO	676
83	14	Maytag	Newton, IA	599
455	19	Chamberlain	Waterloo, IA	581
164	3	SLAAP	St. Louis, MO	429
768	3	Kisco	St. Louis, MO	429

Region 7

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
815	110	Bell	Ft. Worth, TX	1073
444	27	Intercontinental	Garland, TX	1041
234	20	Intercontinental	Garland, TX	1041
257	2	LHAAP	Marshall, TX	958
744	3	Norris	Shreveport, LA	928
167	3	Rheem	New Orleans, LA	920
770	1	Marathon	Longview, TX	

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
742	3	FMC	San Jose, CA	2486
806	12	Remco	Willits, CA	2451
237	4	Remco	Willits, CA	2451
611	4	Remco	Willits, CA	2451
208	9	Lear Siegler	Anaheim, CA	2266
465	2	Wells	Costa Mesa, CA	2266
842	2	Martin-Marietta	Torrance, CA	2266
224	1	RAAP	Riverbank, CA	2405
158	10	Talley	Mesa, AZ	1932

X-Facility

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
445	15	418	5	587	16
669	1	420	5	601	1
798	60	425	10	620	12
95	8	428	4	720	39
191	13	449	3	736	19
204	36	468	7	746	3
211	7	518	6	775	4
221	1	568	3	791	5
230	12	570	11	807	2
415	3	586	1	171	13

Joliet Army Ammunition Plant - Joliet, IL

Shipment data for IPE to localities within Federal Preparedness Agency Regions.

Region 4

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
759	1	Dayron	Orlando, FL	1125 miles
634	2	FMC	Anniston, AL	659

Region 5

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
799	68	Bell & Howell	Chicago, IL	44
574	1	Peerless	Chicago, IL	44

Region 6

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
83	54	Maytag	Newton, IA	289
455	1	Chamberlain	Waterloo, IA	271

Region 9

PEP #	PEP QTY	USER	USER LOCATION	DISTANCE
158	2	Talley	Mesa, AZ	1455

X-Facility

PEP #	PEP QTY	PEP #	PEP QTY	PEP #	PEP QTY
191	8	593	1		
420	42	601	71	736	1
468	71	620	41	807	1

APPENDIX F

Storage Site Survey Questionnaires

Information provided by Mr. Emerson, Commander's Representative, Ravenna AAP, 9 Mar 78.

PLANNING ASSUMPTIONS

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

Ravenna is under the operating control of ARRCOM. All Army and Command regulations related to emergency planning apply to Ravenna. There is no policy other than the regulations concerning the handling of Army PEP's in case of mob.

2. What mobilization plans have been established relative to PEP items?

The only detailed mob plan available is for Ravenna's own PEP. Equipment for other PEP's is only covered by DIPEC mob shipping orders.

3. Are current preposition mobilization movement notices available at the storage site?

Current mob movement notices were on file for approximately half of the PEP's. Some movement notices dated back to 1972-73.

4. What is done with movement notices at the storage site?

All movement notices are filed and retained.

5. Are movement notices received for anything other than IPE?

No.

6. Is there a plan for executing movement notices in case of mobilization?

There are no special provisions for executing movement notices. Direction by the owning Command would be needed prior to out shipment.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

It would depend on circumstances and ARRCOM or higher HQ directions. Technically, the formal paperwork would be needed.

8. Do plans include any provisions for priority shipment of specific items in case of mobilization?

Such provisions are not known.

9. Describe routing steps and time frame for processing a shipment order for a PEP item. Time to actually get the item out the door.

a) Receive DIPEC movement order.

b) Contractor estimates PCH&T.

c) Request funds from DRSAR-IRP-R.

d) Issue modification to contract.

The execution of the above is dependent on receiving an approved funding document from ARRCOM for each piece to be moved. Problems have been encountered in getting timely approval of the funding requests. When the approved funding request is received at Ravenna, a truck can be obtained locally within 24 hours and the item shipped out.

10. Would current storage layout have any impact on out-shipments during mobilization?

No.

11. How many services have PEP items stored at this installation?

Air Force has one PEP with 99 pieces of IPE. DIPEC General Reserve has 224 items in storage. All other items in storage are assigned to Army PEP's.

12. Have priorities between services been established?

Information not available on this question.

13. a) What is the current manpower?

The contractor currently has seven people in IPE handling, which includes two in clerical support. Five people are actually involved in inspecting, maintaining, and shipping equipment.

b) How much manpower is needed to meet mobilization needs?

Manpower needed would depend on time frame established to move out items. The estimated maximum would be 40 people (8 crews of 5 people each) to move out all 3400 pieces stored at Ravenna in about four months. Its estimated that 30 trucks/day could be shipped out under mob. The following <u>assumptions</u> are made for mob conditions:

(1) Truck and rail transportation would be available

(2) Each additional crew can be furnished two 25-30,000 lb capacity for lift trucks.

c. How long would it take to recruit and train?

Recruit and train is estimates at two weeks.

Transportation Study Module

1. Do mobilization plans include provisions for obtaining transportation facilities?

Ravenna is not involved in this.

2. Are facilities such as fork-lift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

Yes.

3. Would any additional materials handling capacity be required in case of mobilization?

Yes - two 25-30,000 lb capacity fork-lift trucks would be required for each additional crew.

4. Can an estimate be made of the maximum out-shipments (number of items, cubic feet, etc.) that can be made from the facility per day with the current staff? With the full mobilization staff?

With the current staff - the one five man crew can, depending on the type of machines, ship a maximum of seven truck loads/day.

Under mob, the eight crews can ship 25-30 trucks assuming transportation is available.

Information at Seneca Army Depot was provided by Mr. LoPinto, Director of Supply; Mr. Calabro, Chief IPE Division; and Mrs. Vanise, Supply Directorate, 5 May 78.

PLANNING ASSUMPTIONS

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

   Seneca Army Depot is under the organizational control of DESCOM.

2. What mobilization plans have been established relative to PEP items?

   The mobilization plans for the IPE mission, along with other functions at Seneca, are in the DARCOM Readiness Evaluation System (DRES) Report. The report does not specifically address the out-shipment of PEP IPE. The report was not reviewed in connection with this study.

3. Are current preposition mobilization movement notices available at the storage site?

   Yes.

4. What is done with movement notices at the storage site?

   Files are established.

5. Are movement notices received for anything other than IPE?

   No.

6. Is there a plan for executing movement notices in case of mobilization?

   There is no specific plan for executing movement notices. Unless otherwise directed, movement notices would be executed on a first come first served basis.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

This would depend on instructions provided by the owning Commands.

8. Do plans include any provisions for priority shipment of specific items in case of mobilization?

There are no such plans at Seneca.

9. Describe routing steps and time frame for processing a shipment order for a PEP item. Time to actually get the item out the door.

Under current conditions, a DIPEC shipping order is received for IPE. The Stock Control Section processes the order and provides location data. Transportation Section arranges for appropriate type and quantity of trucks. The items can usually be loaded within 48 hours after receipt of shipping orders.

10. Would current storage layout have any impact on out-shipments during mobilization?

No.

11. How many services have PEP items stored at this installation?

		No.	Quantity IPE
As of 31 March 1978:	Army PEPS	87	1,915
	Navy PEPS	2	38
	DLA	--	936

12. Is any space in this storage site utilized for idle IPE under DOD General Reserve accountability? If so, how much space is used and how many items are included?

936 items are being stored at Seneca for the General Reserve. Storage space is approximately 1/3 for the General Reserve and 2/3 for PEP's.

13. Have priorities between services been established?

Not applicable to Seneca.

14. What is current manpower? How much manpower is needed to meet mobilization needs? How long would it take to recruit and train?

Current manpower in the warehouse function is 21 people, who are divided into three crews. Problems were encountered in determining manpower needed to meet mobilization workload. The lack of prior experience in personnel buildup for the out-shipment of IPE and the number of assumptions that must be made (location within warehouse(s), number of items that can be put on one truck, availability of material handling equipment, etc) made it impossible to provide an accurate estimate of the optimum mobilization workforce. The following figures were provided as a very rough estimate of current conditions. Based on tonnage, PEP items represent approximately 1,200 truckloads. Current manpower working on a 1-12-7 basis can loan about ten trucks per day or 120 days to ship all items out. Factoring to a 1-8-5 basis it would take over twice as long to ship out all the items. The recruitment and training of personnel would not be a problem. On-the-job training is used in the warehouse area.

Transportation Study Module

1. Do mobilization plans include provisions for obtaining transportation facilities?

   Mobilization plans are the responsibility of the SUBMACOM, not Seneca.

2. Are facilities such as fork-lift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

   Yes.

3. Would any additional materials handling capacity be required in case of mobilization?

   The following estimate was provided:

Quantity	Capacity
2 - Fork lifts	50,000 lb
2 - Fork lifts	30,000
2 - Fork lifts	20,000
1 - Fork lift	15,000
1 - Crane	100 Ton

4. Can an estimate be made of the maximum out-shipments (number of items, cubic feet, etc) that can be made from the facility per day with the current staff? With the full mobilization staff?

   See discussion under question 14 of the Planning Study Module. An additional figure provided was that the current staff could possibly load 15 trucks per day under mobilization conditions, assuming availability of transportation and materials handling equipment.

PLANNING ASSUMPTIONS

Information at Defense Depot Mechanicsburg was provided by Don Mark, Director; Tony Martino, Deputy Director; Justus Arthur, Directorate for Industrial Plant Equipment Operations; and John Lafemina, Transportation Office on 13 June 1978.

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

   Mechanicsburg is under the control of DLA. Emergency planning policy has been implemented through their War and Emergency Plan. All directorates have written plans for emergency operations.

2. What mobilizations plans have been established relative to PEP items?

   Their plans do not specifically address PEP IPE. The PEP's would be included in the overall IPE function.

3. Are current preposition mobilization movement notices available at the storage sites?

   Yes.

4. What is done with movement notices at the storage sites?

   The notices are retained in files which are in movement notice number sequence.

5. Are movement notices received for anything other than IPE?

   No. In the case of Mechanicsburg, DLA only assumed responsibility for IPE when the Depot was established at the Navy facility. At this time, only IPE is being stored by DLA for PEP's.

6. Is there a plan for executing movement notices in case of mobilization?

   There is no specific plan for executing the movement notices. Since the movement notices do not have a priority indicated on them, the shipment of a specific PEP would have to be based on a request from a Command for direction by DIPEC.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

No. Items may be shipped based on TWX or phone call.

8. Describe routing steps and time frame for processing a shipment order for a PEP item. Time to actually get the item out the door.

After a move order is received from DIPEC, IPE Operations Directorate personnel prepare the item for shipment and provide the transportation Office physical characteristics of the item so that the proper carrier can be obtained. This may take 2-3 days because of other workload. The Transportation Office arranges for the carrier which can take up to 7 -- 10 days. IPE Operations personnel are responsible for loading the item on the carrier.

9. Would current storage layout have any impact on out-shipments during mobilization?

No. Six of the nine warehouses used for storage have overhead cranes which would make the movement of any item simple.

10. How many PEP's and quantity of IPE are being stored for each service?

The site did not have a breakout of the number of PEP's. The quantities of IPE are: Army 1194
Air Force 195

11. Is any space in this storage site utilized for idle IPE under DOD General Reserve accountability? If so, how much space is used and how many items are involved?

Approximately 10,000 items are being stored for the General Reserve. 690,000 square feet are being used in the storage of all IPE; or about 10 percent of the space is devoted to Army PEP's.

12. What is the current manpower supporting PEP related functions?

Manpower supporting just PEP functions could not be identified. There are 24 people in the Storage Division who are responsible for moving IPE and preparing it for shipment.

13. What is the maximum number of items that can be shipped out per day with the current staff?

Based on data for the first half of 1978 when 900 pieces were shipped out, it was estimated that six to eight items per day were shipped out with the present staff. This was considered a maximum since a backlog of work existed during this time.

14. How much manpower would be needed to meet mobilization requirements?

Using the current staff of 24 in the Storage Division on a 1-8-5 shift basis, and an average of seven items per day, it would take 143 days to ship out the 1,000 PEP items (other than those assigned to X-facilities). Personnel at the Depot estimated that a total of 75 people could work on a 3-8-7 basis with a minimum of interference between crews. Assuming the same average rate of outshipments, the mobilization crew could ship out the 1,000 PEP items in approximately 48 days. This could be accomplished if the crews concentrated only on PEP's. Since there are about 10,000 General Reserve items at the Depot with an unknown quantity that would have to be shipped in case of mobilization, the estimate for PEP items is not representative of the actual time that would be required.

15. How many PEP items could be shipped out per day with the mobilization staff? (Assume the average PEP items is 9,500 lbs. and requires 65 sq. ft.)

As stated above, it was estimated that an average of seven items per shift would be shipped out, or approximately 21 items per day under the projected three shift operation.

16. How long would it take to recruit and train the mobilization staff?

No problem was foreseen in recruiting the needed personnel in the area's labor market. It could be completed in a week with training being OJT.

Transportation Study Module

1. Have there been any problems in obtaining truck transportation for IPE? How is the determination made to use rail transportation and are any problems encountered when it is used?

   Transportation Office personnel stated that there are no problems obtaining trucks locally. It usually takes 3-4 days to get a carrier to schedule a truck into the Depot. In those cases where oversized loads are involved (10,000 lbs or more), the MTMC (Eastern Area) provides a routing and arranges for the carrier and any special permits that may be required. This action may take a week or more. Rail transportation is used when indicated on the DIPEC shipment orders, it is seldom used.

2. Do mobilizations plans include provisions for obtaining the required transportation facilities?

   Mobilization plans for the transportation area include requirements for people and emergency procedures. Under their emergency procedures arrangements for all transportation would be made at the Depot.

3. Are facilities such as fork-lift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

   Yes. Six of the nine storage warehouses have overhead cranes that can, if needed, directly load trucks in the warehouses.

4. Would any additional materials handling capacity be required in case of mobilization?

   The only additional item needed would be the rental of a 30,000 lb. mobile crane.

PLANNING ASSUMPTIONS

The following information was obtained at DCSC, Columbus, Ohio, from Mr. Ford, Production Control Branch; Mr. McDonald, Chief, Storage Division - both in the Directorate of IPE - and Ms. Stout, Directorate of Storage and Transportation on 14 Jun 78.

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

   DCSC is under the operating control of DLA. Under DLA regulations, DCSC prepares the Field Activity War and Emergency Support Plan which includes procedures to be implemented in case of mobilization.

2. What mobilizations plans have been established relative to PEP items?

   The facility does not have specific plans for PEP's. They would be covered under the overall IPE mission.

3. Are current preposition mobilization movement notices available at the storage site?

   Yes. But the notices are not reviewed in order to determine if one was received for each item being stored.

4. What is done with movement notices at the storage site?

   Notices are filed by movement notice number.

5. Are movement notices received for anything other than IPE?

   No.

6. Is there a plan for executing movement notices in case of mobilization?

   No. Notices would be handled as they are now. Any priority requirements would have to be indicated on the DIPEC shipping order.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

   No. But items can be shipped per verbal direction or TWX from DIPEC.

8. Describe routing steps and time frame for processing a shipment order for a PEP item. Time to actually get the item out the door.

After receiving shipping order from DIPEC, the item is located and Storage Division personnel check out and prepare the item for shipment (check bracing, crate, etc). These operations take approximately 1/2 day. The Directorate of Storage and Transportation arranges for a carrier. Although the time required depends somewhat on where the item is to be sent, a truck can usually be obtained in 2-3 days. Personnel in the Directorate of IPE stated that trucks are provided in an average of four days for items with priority of one through eight, and eight days for priority eight and above.

9. Would current storage layout have any impact on out-shipments during mobilization?

No.

10. How many PEP's and quantity of IPE are being stored for each service?

The storage site does not keep track of the number of PEP's that have equipment stored there. The quantities of IPE being stored are:
Army 1,217
General Reserve 3,369

DLA has 227 "lines" in storage, this is equipment and tooling designated to make a specific item.

11. Is any space in this storage site utilized for idle IPE under DOD General Reserve accountability? If so, how much space is used and how many items are involved?

The total floor space used for storage of IPE is 146,080 sq. ft. Using a ratio of items being stored, approximately 38,800 sq. ft. is used to store PEP IPE with the remainder used for General Reserve items.

12. What is the current manpower supporting PEP related functions?

Facility personnel could not break out people used just for PEP's. The following figures were provided for the whole IPE function:

a. Production and Quality Control Office - 27 people - equipment inspectors and administration support.

b. Maintenance Division - 65 people (51 in shop) - equipment repair, rebuild, and condition assessment.

c. Storage Division - 42 people (38 in shop) - packing, crating, and loading of equipment.

13. What is the maximum number of items that can be shipped out per day with the current staff?

The Chief of the Storage Division estimated that four to eight items per day could be shipped out by the current staff. The choke point for shipments is the Crating Department, which has 11 people and is responsible for the proper preparation of the item for shipment. Based on actual shipments during the first half of 78, 4.2 items per day were shipped out.

14. How much manpower would be needed to meet mobilization requirements?

It was estimated that by doubling the personnel in the Crating Department, 10 to 20 pieces per day could be shipped out. The mobilization requirement would be about 800 items (an additional 400 items are assigned to X-facilities and would presumable be shipped out at a later date). The 800 items could be shipped out in 60 days by maintaining an average of 13 item shipments per day. This seems to be within the capacity of the unit with multi-shift operation. This also assumes complete emphasis on the shipment of PEP IPE, which does not seem appropriate. There are no estimates on quantities of General Reserve items that would have to be shipped out also.

15. How many PEP items could be shipped out per day with the mobilization staff? (Assume the average PEP item is 9,500 lbs. and requires 65 sq. ft.)

See item 14.

16. How long would it take to recruit and train the mobilization staff?

There would be no problem in recruiting people from the area's labor force. Training would be OJT.

Transportation Study Module

1. Have there been any problems in obtaining truck transportation for IPE? How is the determination made to use rail transportation and are any problems encountered when it is used?

   Transportation personnel stated that there were no problems in obtaining trucks locally. MTMC gets involved when loads are over 10,000 lbs., and provides routings, waivers, and the carrier. Rail transportation is seldom used since it is more expensive than truck. It can be used on oversized loads or when directed by shipping instructions.

2. Do mobilization plans include provisions for obtaining the required transportation facilities?

   Local mobilization plans include provisions for emergency operation of the transportation area. All carriers would be obtained locally.

3. Are facilities such as fork-lift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

   Yes.

4. Would any additional materials handling capacity be required in case of mobilization?

   No additional equipment would be needed.

Information at Pontiac Army Storage
Facility was provided by Mr. Chabot,
Industrial Machine Repair Leader
14 June 1978

PLANNING ASSUMPTIONS

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

A: TARCOM controls the site but provides minimal emergency policy. DIPEC provides inventory records, directs the grant program to schools, directs in-house transfers from one PEP to the next and issues movement notices.

2. What mobilization plans have been established relative to PEP items?

A: Unknown.

3. Are current preposition mobilization movement notices available at the storage site?

A: Yes.

4. What is done with movement notices at the storage site?

A: All notices are on file with annual updates which are issued by DIPEC. No clerical backlog now exists.

5. Are movement notices received for anything other than IPE?

A: No.

6. Is there a plan for executing movement notices in case of mobilization?

A: Unknown.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

A: Uncertain. A phone call to John Eitel, DIPEC, was made. DIPEC was aware of this possible occurance and advised that such shipments would be authorized and directed by telephone.

8. Describe routing steps and time frame for processing a shipment order for a PEP item. Time to actually get the item out the door.

A: With the present workforce under peacetime conditions, a wide variance of methods and timeframes occurs. Administrative processing at the facility usually takes 3 hours/item. Time for crating and handling depends on the type and makeup of the item. Up to half of the items require skidding before shipment or repairs to existing skids. The skid materials supporting some items have deteriorated after 20 years in storage. Therefore, at least 6 hours/item is needed for crating and handling. Additional time is used for items in excess of 45,000#. These require rail facilities but the rail yard is $3\frac{1}{2}$ miles away. Additional time is used for items in excess of 30,000# because crane rentals must be arranged. Additional time is required to receive bills of lading; up to 2 days if the item weighs 10,000# or less - up to 2 weeks for heavier items. The bills for heavy items are issued from Bayonne, New Jersey.

Under mobilization conditions some short cuts are possible. Cranes and crane operators would be under lease and all bills of lading would be produced locally as done during the Korean War.

9. Would current storage layout have any impact on out-shipments during mobilization?

A: No appreciable impact expected. Pontiac consists of seven interconnected warehouses under one 14 acre roof. One warehouse contains DOD General Reserve items and items tagged for disposal. The other six hold PEP items which are grouped according to PEP number. Not every machine is accessible from the aisles. Some interferrence would occur if an item is taken from the center of a cluster.

10. How many PEP's and quantity of IPE are being stored for each Service?

A: 63 PEP's and 1951 items. Nothing is stored for other services. Approximately 400 additional items will soon be shipped in from Lima Army Modification Center.

11. Is any space in this storage site utilized for idle IPE under DOD General Reserve Accountability? If so, how much space is used and how many items are involved?

A: Yes. DOD Reserve is now 510 items due to recent transfer of 70 items from PEP 501. Each item covers about 50 sq. ft. The results - about 25,500 sq. ft.

12. What is the current manpower supporting PEP related functions?

A:

Administrative Staff	Warehouse Staff
1 - chief administrator	1 - rigger
1 - industrial machine repair leader	1 - fork lift driver
1 - maintenance accounts clerk	1 - industrial machine repairman
1 - clerk typist	1 - crater
	3 - machine tool inspectors

TOTAL: 11

13. What is the maximum number of items that can be shipped out per day with the current staff?

A: With currently reduced staffing, $2\frac{1}{2}$ days/item. With staff restored to former size, $1\text{-}1\frac{1}{2}$ days/item. Pontiac has lost manpower spaces.

14. How much manpower would be needed to meet mobilization requirements?

A: One or two extra teams should be added in the warehouse and extra office help will be needed. The total manpower should be as follows:

Administrative Staff	Warehouse Staff
1 - chief administrator	3 - riggers
1 - industrial machine repair leader	3 - fork lift drivers
2 - maintenance account clerk	3 - industrial machine repairman
3 - clerk typists	2 - craters
1 - assistant to the chief	4 - machine tool inspectors
	1 - warehouse foreman

15. How many PEP items could be shipped out per day with the mobilization staff? (Assume the average PEP item is 9,500 lbs. and requires 65 sq. ft.)

A: 2 machines/day/team but only with minimal skidding and minimal rail. (I calculated the expected elapsed time for site clearance as follows:

$$\frac{1950 \text{ items}}{2 \text{ items/day/team} \times 3 \text{ teams}} = 325 \text{ working days single shift}$$

I then asked Mr. Chabot if one team could be assigned to each PEP warehouse for a total of six teams. He said that it was possible but it would represent an upper limit. To exceed six teams may dimish output. Additional shifts have never been used at Pontiac but a 6 day week was necessary during the Korean War).

Therefore, the warehouse staff listed in question #14 would double and the site clearance time would drop to 162 days.

16. How long would it take to recruit and train the mob staff?

A: Three to four weeks.

Transportation Study Module

1. Have there been any problems in obtaining truck transportation for IPE? How is the determination made to use rail transportation and are any problems encountered when it is used?

A: No problems with truck transportation; 21 companies can serve Pontiac. Determination to use rail (Grand Trunk RR) is made based on item weight and size--45,000# plus needs rail. A crane is rented to load rail shipments. These rentals are available from three sources.

2. Do mobilization plans include provisions for obtaining the required transportation facilities?

A: No.

3. Are facilities such as fork-lift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

A: Generally yes. In-house equipment can handle 85% of all items stored at Pontiac. There have been isolated delays caused by the unavailability of special purpose rail cars.

The current material handling capability is composed of:

1 - 15 ton fork-lift
1 - 10 ton fork-lift
1 - 7-1/2 ton fork-lift
1 - 2 ton fork-lift
1 - A frame hoist in repair/skid area
1 - 5000# adjustable ramp for van loading

4. Would any additional materials handling capacity be required in case of mobilization?

A: Yes, one low capacity boom crane for picking items from a cluster without disturbing neighboring items.

Information at DIPEF Atchison was provided by Mr. Garten, Operations Supervisor; Mrs. Ramirez, Production Planner; and Mr. Lein, Transportation Supervisor, 20 June 1978.

PLANNING ASSUMPTIONS

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

DIPEC.

2. What mobilization plans have been established relative to PEP items?

DIPEC annually provides a printout which updates the preposition mobilization movement notice. It identifies any change in planned producer location and identifies each machine in the PEP.

3. Are current preposition mobilization movement notices available at the storage site?

Yes; but, most notices do not contain any entries in blocks 7-15. Prior to 1963, entries were made to identify priorities among items in each PEP and to specify the time allowed for PEP shipment.

4. What is done with movement notices at the storage site?

All notices have been filed in ascending sequence by movement notice number.

5. Are movement notices received for anything other than IPE?

No. Movement notices are received only for DIPEC reportable IPE.

6. Is there a plan for executing movement notices in case of mobilization?

Specific plans are unknown. Atchison presumes that DIPEC will issue priority instructions after M-Day.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

Unknown.

8. Describe routing steps and timeframe for processing a shipment order for a PEP item. Time to actually get the item out the door.

a. The item is checked for weight and made up for shipment.

b. If the shipment consists of small items and is less than truckload (LTL), Atchison prepares the bill of lading. Otherwise, Atchison must request a routing from DCAS, St. Louis. Whenever the order has an 02 priority, the request is made by phone; otherwise, a written request is made. The time needed to get a bill of lading, using written procedures, usually exceeds ten days, depending on arrangements for mode of shipment.

c. For a typical item, however, three days are sufficient for all administrative actions and for physical preparation to military specifications.

9. Would current storage layout have any impact on out-shipments during mobilization?

No adverse impact is expected. A general description follows:

a. A few heavy, bulky PEP items are kept in a Quonset building next to the rail dock or they rest, well shrouded, on a concrete pad nearby.

b. All else is stored subsurface. Nominal overhead clearance is 12 feet. Main aisles and passageways are wide enough to accommodate working forklift trucks (FLT's) two abreast; but, many areas would restrict passage to one vehicle at a time.

c. The IPE is clustered in gallery areas by PEP number. Most, if not all, are skidded. Small machines in one area are skidded and rest on two-tiered storage racks. Each item in tiered storage is immediately accessible by FLT.

10. How many PEP's and quantity of IPE are being stored for each service?

Army has 102 PEP's and 3558 items. Nothing is stored for Air Force or Navy.

11. Is any space in this storage site utilized for idle IPE under DOD General Reserve accountability? If so, how much space is used and how many items are involved?

Yes, 304,183 sq. ft. and 2089 items.

12. What is the current manpower supporting PEP related functions?

Government QA Representative:		1
Day & Zimmerman Employees:		
General Administrative and Support		2
Storage Operations		22½
Admin-Supt-Supv	5½	
Direct	17	
Depot Maintenance Operations		36½
Admin-Supt-Supv	11½	
Direct	25	

Facilities Maintenance & Support		
Admin-Supt-Supv		39½
Direct	13	
Disposal	26½	
		5½
	TOTAL	107

13. What is the maximum number of items that can be shipped out per day with the current staff?

Eight items/day is a conservative estimate. Under these conditions, military specifications are strictly observed.

14. How much manpower would be needed to meet mobilization requirements?

Twenty more people are needed. They would be assigned as riggers, forklift operators and carpenters. The workforce would be reorganized and split into three shifts.

15. How many PEP items could be shipped out per day with the mobilization staff? (Assume the average PEP item is 9,500 lbs. and requires 65 sq ft).

One hundred items/day. Under these conditions, IPE preparation would follow good commercial practice. Military specifications would not be observed. The result—35 working days to remove all PEP items.

16. How long would it take to recruit and train the mob staff?

Seven days.

Transportation Study Module

1. Have there been any problems in obtaining truck transportation for IPE? How is the determination made to use rail transportation and are any problems encountered when it is used?

a. Yes. Trucking companies occasionally cannot provide specialized trailers such as flats, lowboys, and drop centers when they are needed. The Government always routes shipments through carriers with the cheapest rates. This practice sometimes produces inferior service, which is reported. A report of poor service usually excludes a carrier from future consignments. Fifteen to twenty carriers are now used.

b. As required by Day & Zimmerman contract, St. Louis DCAS routes IPE shipments. If an item exceeds 8½ ft. tall by 8 ft. wide or exceeds 10,000 lbs. or if the shipment exceeds one truckload, the Military Traffic Management Command (MTMC), Bayonne, NJ, must provide the routing.

c. Mode of shipment—rail, truck, or barge—is usually specified by the consignee. Atchison has experienced truck shipments up to 60,000 lbs.

However, rail is the usual mode for items over 45,000 lbs. Approximately 2% of the items in Atchison are too big to be shipped by truck.

2. Do mobilization plans include provisions for obtaining the required transportation facilities?

No. Retired records show that this practice was discontinued in 1963.

3. Are facilities such as forklift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

More than adequate. There are:

6 - 15,000# Heisters
2 - 6,000# FLT's
4 - 4,000# FLT's
2 - 40,000# FLT's
5 - 4,000# electric FLT's
1 - 10,000# electric boom crane
3 - truck docks
1 - rail dock with 50-ton boom crane
1 - barge terminal

4. Would any additional materials handling capacity be required in case of mobilization?

No.

Information at Defense Depot Tracy, Stockton, CA, was provided by Mr. Oliva, IPE Storage Division Chief, and Mr. Hicks, Storage Branch Chief, 21 June 1978.

PLANNING ASSUMPTIONS

Planning Study Module

1. What organization controls this site and provides emergency planning policy?

Administration of the IPE storage site at Stockton is provided by the Defense Depot Tracy, Tracy, CA. Tracy and Stockton are 25 miles apart. DIPEC provides IPE policy.

2. What mobilization plans have been established relative to PEP items?

Preposition mobilization movement notices with annual updates are available. Another action related to mobilization planning was accomplished recently. Most PEP items were taken from scattered warehouses and placed in three warehouses dedicated exclusively to IPE storage. An improvement in shipping efficiency should result.

3. Are current preposition mobilization movement notices available at the storage site?

Yes. Refer to question 2 above.

4. What is done with movement notices at the storage site?

All notices are filed.

5. Are movement notices received for anything other than IPE?

No. Movement notices are received only for DIPEC reportable IPE.

6. Is there a plan for executing movement notices in case of mobilization?

No operating procedures are described specifically for emergencies.

7. In case of mobilization, are any provisions made for shipping out items without a movement notice?

Response speculative. For such items, Stockton would coordinate with DIPEC and possibly use a "dray ticket".

8. Describe routing steps and timeframe for processing a shipment order for a PEP item. Time to actually get the item out the door.

a. The MILSTRIP shipping order (1348M card) is received from DIPEC. The control clerk logs it and passes it to the locator clerk who verifies that the machine is there. Given back to the control clerk, it is forwarded to Tracy.

b. Tracy then issues a 1348-1 to Stockton. The 1348-1 is recorded and forwarded to the storage/shipping operation. The item is then moved to the packing/preservation section and QC is notified to inspect. When the item is ready, storage/shipping calls Tracy for a Government Bill of Lading (GBL).

c. For most items Tracy issues the GBL, but for those over 10,000#, MTMC's western office in Oakland determines the routing. When Stockton receives the GBL, the transport company is called.

d. A five or six day delay occurs in passing information back and forth between Stockton and Tracy. Under most circumstances there is a one day wait for truck carriers. For a typical priority group 1 item, it takes twelve days to get the item out the door. When shipping documents are handcarried between Stockton and Tracy, the time drops to 6 days per item.

e. Tracy advised Stockton that administrative time could be reduced to a matter of hours during emergencies. All GBL routings from Tracy or Oakland would be made by phone.

9. Would current storage layout have any impact on out-shipments during mobilization?

Adverse impact not expected. The Stockton IPE storage activity is a tenant on a Navy property, Rough and Ready Island. IPE is stored in three warehouses, #713, #813, and #1005, with useable square footage at 80340, 86850, and 66636, respectively. Each warehouse has two access doors which allow ingress by trucks or egress by FLT's to trucks waiting outside. Each warehouse has a rail dock. Most PEP items are arranged in clusters by PEP Number. Aisle space is generous. Smaller machines are stored in double-tiered racks.

10. How many PEP's and quantity of IPE are being stored for each service?

Army has 79 PEP's and 1261 reportable items. Nothing is stored for Air Force or Navy.

11. Is any space in this storage site utilized for idle IPE under DOD General Reserve accountability? If so, how much space is used and how many items are involved?

The quantity is negligible.

12. What is the current manpower supporting PEP related functions?

Division Chief		1
	Clerk	1
Storage Branch Chief		1
	Clerk	1
	FLT Operators--Receiving	2
	Warehouse Foreman	1
	FLT Operators--Warehousing	7
	Truck Drivers	2
Shipment Processing Branch Chief		1
	Clerk	1
	Craters	10
	Press Mechanics	5
	Painters	3
	TOTAL	36

13. What is the maximum number of items that can be shipped out per day with the current staff?

Twenty-four truckloads per day (1 item per truckload to be conservative).

14. How much manpower would be needed to meet mobilization requirements?

No recruiting would be necessary. Occasional support from riggers presently assigned to the Directorate would be needed to load heavy items.

15. How many PEP items could be shipped out per day with the mobilization staff? (Assume the average PEP item is 9500 lbs. and requires 65 sq. ft.)

Twenty-four items per day; one 8-hour shift. Result--53 days.

16. How long would it take to recruit and train the mob staff?

Not applicable. Additional staff is not needed.

Transportation Study Module

1. Have there been any problems in obtaining truck transportation for IPE? How is the determination made to use rail transportation and are any problems encountered when it is used?

Problems with truck transport are negligible. Rail is used as determined by the transportation office at Tracy--based on weight, dimensions, and cost. Rail has few problems except extra time and cost incurred for bracing and blocking.

2. Do mobilization plans include provisions for obtaining required transportation facilities?

Unknown.

3. Are facilities such as forklift trucks, hoists, freight docks for truck and rail adequate to meet current requirements?

More than adequate. Stockton has 15,000# Heisters, 10,000# FLT's, and an 80-ton boom crane. Each warehouse has two access doors, one portable ramp, and one rail dock. Dock facilities are also available for ocean freighters.

4. Would any additional materials handling capacity be required in case of mobilization?

No.

APPENDIX G

Sample DD Form 1149,
Requisition and Invoice/
Shipping Document

(The Mobilization Shipping Order)

REQUISITION AND INVOICE/SHIPPING DOCUMENT

1. FROM: SEA300 DIPEC, Memphis, TEnnessee 38114	SHEET NO. 1	NO. OF SHEETS	5. REQUISITION DATE / 6. REQUISITION NO.
	7. DATE MATERIEL REQUIRED		8. PRIORITY
2. TO: Commander Defense Const Supply Center Directorate of IPE Operations IPE Storage Div., Whse 5, Sect 5 Columbus, Ohio 43215	9. AUTHORITY OR PURPOSE: DIPEC M/N JAX0023B		
	10. SIGNATURE: Frank Rasco		11a. VOUCHER NUMBER AND DATE
3. SHIP TO - MARK FOR: Chrysler Corp., Air Temp Div. Sterling Heights, Mich. 48007	12. DATE SHIPPED		b. VOUCHER NUMBER AND DATE
	13. MODE OF SHIPMENT		14. BILL OF LADING NUMBER
	15. AIR MOVEMENT DESIGNATOR OR PORT REFERENCE NUMBER		

4. ACCOUNTING AND FUNDING DATA

ITEM NO. a	FEDERAL STOCK NUMBER, DESCRIPTION, AND CODING OF MATERIEL AND/OR SERVICES b	SUPPLEMENTARY ADDRESS c	QUANTITY REQUESTED d	SUPPLY ACTION e	TYPE CONTAINER f	CONTAINER NOS. g	UNIT PRICE h	TOTAL COST i
	"See attached Listing" Items 1 and 2 Reactivation PEP 0825 Distribution: US Army Prod Equip Agency ATTN: DRXPE-IP Rock Island Arsenal Rock Island, IL 61201 US Army Armament CMD ATTN: DRSAR-PPI-WF Rock Island, IL 61201							

16. TRANSPORTATION VIA MATS OR MSTS CHARGEABLE TO

17. SPECIAL HANDLING

RECAPITULATION OF SHIPMENT		TOTAL CONTAINERS	TYPE CONTAINER	DESCRIPTION	TOTAL WEIGHT	TOTAL CUBE
18.	ISSUED BY					
	CHECKED BY					
	PACKED BY					
				TOTAL		

19. RECEIPT				
	CONTAINERS RECEIVED EXCEPT AS NOTED	DATE	BY	SHEET TOTAL
	QUANTITIES RECEIVED EXCEPT AS NOTED	DATE	BY	GRAND TOTAL
	POSTED	DATE	BY	20. RECEIVER'S VOUCHER NO.

DD FORM 1 MAR 69 1149

81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

REPLACES EDITION OF 1 MAY 58 WHICH MAY BE USED

G-1

APPENDIX H

Review of Mobilization Shipping Orders

APPENDIX

Review of Mobilization Shipping Orders

PEP No.	Comments
049	No DD Form 1149 for items stored at Pontiac Storage Facility.
053	No DD Form 1149 for items stored at Pontiac Storage Facility, Ravenna AAP, Seneca AD, Tobyhanna AD, and DIPEF-Atchison.
071	No DD Form 1149 for items at Seneca AD.
095	PEP is an X-facility but DD Form 1149 for Defense Depot-Mechanicsburg, DIPEF-Atchison, Kansas AAP, Seneca AD, Pontiac Storage Facility, and Ravenna AAP indicate ship to Revere Copper, Clinton, IL.
127	No DD Form 1149 for items at DIPEF-Atchison, Defense Depot Mechanicsburg, and Pontiac Storage Facility.
192	PEP is an X-facility but old DD Form 1149 for Defense Depot-Mechanicsburg, and Seneca AD show Ingraham Co., Bristol, CN as planned producer.
204	PEP is an X-facility but old DD Form 1149 for Defense Depot-Mechanicsburg, Defense Depot-Tracy, Pontiac Storage Facility, and Seneca AD show Kennedy Van Saun, Danville, PA as planned producer.
219	No DD Forms 1149 for items at DIPEF-Atchison and Defense Depot-Mechanicsburg.
227	Planned producer is Temco Inc., but DD Form 1149 shows Whale Electronics, Nashville, TN.
422	No DD Form 1149 for items at DCSC-Columbus.
438	DD Form 1149 shows Chrysler Corp., Detroit, MI instead of Chrysler Corp., Warren, MI as planned producer.
443	No DD Form 1149 for items at DIPEF-Atchison and New Cumberland AD.
455	No DD Form 1149 for items at Defense Depot-Tracy and Seneca Army Depot.
459	No 1978 update of shipping orders.
461	No DD Form 1149 for items at Twin Cities AAP.

PEP No.	Deficiency
495	No 1978 update of shipping orders for Seneca AD.
571	PEP is an X-facility but equipment stored at eight different sites has shippers to Stewart-Warner, Lebanon, IN.
581	No DD Form 1149 for items at Seneca AD.
634	No DD Form 1149 for items at Seneca AD.
737	No DD Form 1149 for items at DCSC-Columbus.
742	No DD Form 1149 for items at DIPEF-Atchison.
763	No DD Forms 1149 for items stored at eight different sites.
780	No data for items stored at Fairfield, NJ, New Cannan, CT, Springfield, NJ, Worchester, MA, and Philadelphia, PA.
787	No data on items at DIPEF-Atchison and Seneca AD.
798	PEP is an X-facility but items at DIPEF-Atchison, Seneca AD, DCSC-Columbus, Defense Depot-Mechanicsburg, Defense Depot-Tracy, and Pontiac Storage Facility have shipping documents to Banger Punta, Springfield, MA.

NOTE: Comments on "X-Facility" PEP's reflect a temporary inconsistency in IBEA's files. Mobilization Shipping Orders for these five "X-Facility" PEP's will be deleted when the next annual update is received from DIPEC. DIPEC does not issue shipping order updates on PEP's that have no planned producers.

APPENDIX I

Storage Site Clearance Timeframes

(Assuming 24 Hour/Day Operation)

SITE CLEARANCE TIME FRAMES
(ASSUMING 24 HOUR/DAY OPERATION)

SITE	SHIFT (HRS/DAY)	START RATE (ITEMS/DAY)	LEAD TIME (DAYS)	MAX RATE (ITEMS/DAY)	QTY SHIPPED DURING LEADTIME	QTY SHIPPED DURING END OF LEADTIME TO 60 DAYS	TOTAL QTY SHIPPED IN 60 DAYS	# DAYS NEEDED TO CLEAR SITE / PERCENT QTY SHIPPED IN 60 DAYS			
								FUND PROD PEP ONLY	ALL ARMY PEP	ALL PEP	ALL PEP & RESERVE
RAVENNA	24	7	28	30	1356	2880	4236	32 DAYS 100%	41 DAYS 100%	42 DAYS 100%	44 DAYS 100%
PONTIAC	24	1	42	24	525	432	957	84 DAYS 62%	118 DAYS 41%	118 DAYS 41%	141 DAYS 33%
SENECA	24	9	14	36	315	1656	1971	46 DAYS 100%	61 DAYS 96%	62 DAYS 96%	88 DAYS 66%
COLUMBUS	24	5	14	30	245	1380	1625	33 DAYS 100%	46 DAYS 100%	46 DAYS 100%	159 DAYS 35%